Water Resources Advisory Committee

Sue Luft **Chairperson** | Linda Chipping **Vice Chairperson** | Courtney Howard **Secretary**

Room 207, County Government Center PH (805) 781-1016
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February 11, 2015

Honorable Debbie Arnold
Chairperson, Board of Supervisors
County of San Luis Obispo
1050 Monterey Street
San Luis Obispo, CA 93408

Subject: Water Resources Advisory Committee Comments on the Water Supply, Water Systems, and Wastewater Systems Chapters of the 2012/2014 Resource Summary Report

Honorable Madams and Sirs,

This letter serves to transmit the Water Resources Advisory Committee's (WRAC) comments on the Water Supply, Water Systems, and Wastewater Systems Chapters of the 2012/2014 Resource Summary Report (RSR).

At the January 7, 2015 WRAC meeting, WRAC members approved formation of an ad hoc subcommittee tasked with reviewing the Water Supply, Water Systems, and Wastewater Systems Chapters of the 2012/2014 RSR. Subcommittee members included: Member Hendrickson (Atascadero Mutual Water Company), Member Mayer (Templeton CSD), Member Gresens (Cambria CSD), Member Lucey (Oceano CSD), Member Gillespie (Environmental At-Large), and Member Faulkner (District 5).

The subcommittee met on January 21st to review the RSR, and provided a report at the WRAC meeting on February 4th. At the February 4th WRAC meeting, the WRAC reviewed and approved the ad hoc subcommittee's comments and voted (14-2-6) to submit the comments to your Honorable Board and the County Planning and Building Department for consideration.

Respectfully submitted,

A. Sue Luft
WRAC Chairperson

Attachments: Water Supply, Water Systems, and Wastewater Systems Chapters of the 2012/2014 Resource Summary Report

cc: San Luis Obispo County Board of Supervisors, All Districts
Brian Pedrotti, County Planning and Building Department

Purpose of the Committee:

To advise the County Board of Supervisors concerning all policy decisions relating to the water resources of the SLO County Flood Control & Water Conservation District. To recommend to the Board specific water resource programs. To recommend methods of financing water resource programs.

Excerpts from WRAC Bylaws dated 8/28/2012

Suggested Comments on the Water Supply, Water Systems, and Wastewater Systems Chapters of the 2012/2014 Resource Summary Report (RSR)

At its eetin on January 7, 2015, the WRAC for ed an Ad Hoc Subco ittee (Subco ittee) to review the Water Supply, Water Syste s, and Wastewater Syste s chapters of the RSR of the Resource Mana e ent Syste (RMS). The Subco ittee et at 10:00 a on Wednesday, January 21, 2015, at the office of the Atascadero Mutual Water Co pany. Me bership of the Subco ittee included:

Representative	Organization	Present	Conference Call
Alternate Jai e Hendrickson, Chair	Atascadero Mutual Water Co pany	x	
Me ber Tina Mayer	Te pleton CSD	x	
Me ber Bob Gresens	Ca bria CSD		x
Me ber Mary Lucey	Oceano CSD		x
Me ber Annie Gillespie	Environ ental-at-lar e		x
Erin Faulkner	District 5 Representative		x

Also in attendance:

Representative	Organization	Present	Conference Call
Me ber John Neil	Atascadero Mutual Water Co pany	x	
Brian Pedrotti	SLO County Plannin Dept.		x
Paul Sorensen		x	

The Subco ittee proposed co ents re ardin the Water Supply, Water Syste s, and Wastewater Syste s chapters of the RSR, which were considered by the WRAC at its February 4, 2015, eetin . The WRAC approved the Subco ittee co ents with a few chan es, which have been incorporated below.

In order for the various entities to be able to provide co ents re ardin their water supply/syste , the WRAC is requestin that additional ti e be allowed for co ents. The WRAC requests that the presentation to the Board of Supervisors be oved back a onth past the planned March 10th date.

Table of Contents: Please list the roundwater basins and water syste s or a encies in the water section and a encies in the wastewater sections so that they can be found in the docu ent without the need to search throu h the sections.

Insert an Executive Su ary includin the Purpose of this report, a Su ary of Top Priorities, and Possible Actual Solutions.

In eneral:

- Forecasted Water Supply and De and Tables: Reco end that the row labeled Other Groundwater Sources should be rena ed to Other Water Supply Sources.
- SWOT for each resource would be helpful.

- State why a chan e in reportin fro re ion to resource.
- Include for s sent out to a encies that retrieve data for this report.
- Placin all Water Supply at LOS III devalues the ratin s provided by Staff.
- All data co pilin , reportin , reco endations etc. should be sa e for each LOS state ent and reco endation.

Pa e 4, County Population and Buildin Per it Data. Population increase, co ercial develop ent, a ricultural develop ent and crop chan es are de and for all resources. This section would benefit by bein very data driven and specific to support de and state ents. Su est re ovin pa e 5 as it only tells a s all part of the story and insertin a table with current and forecasted rowth esti ations for eneral population increase, co ercial develop ent, and esti ated a ricultural develop ent. Residential buildin per its don't truly tell provide you load increase e. . 1 custo ho e but only 2 residents part ti e vs. 1 duplex with ten fullti e occupants etc.

Pa e 6, Levels of Severity. I understand these are defined by the BOS however shouldn't we standardize our reportin with the state i.e. Hi h, Mediu , and Low and utilize their definitions since we will be reportin under SGMA? In addition, the state ent "the ti e required to correct the proble is lon er than the ti e available before the dependable supply is reached." i plies that solutions for Level III are identified and scheduled. Is that true?

Pa e 1 , Su ary of Reco ended Levels of Severity...

- The defined LOS on the previous tables do not have a None. Reco ended LOS of None will then need to be defined. Does this ean no action, no data etc.?
- How is every basin in-re ards to water supply a LOS of III? By havin each of the basins at a LOS III, are we devaluin the ratin syste .
- Reco ended actions should be data driven reco endations not eneralized state ents that don't provide the BOS with real answers.
- If specific reco endations cannot be iven at this ti e, we reco end you re ove these sections and have this report be an infor ational report on current and forecasted resources valuations.

Table I-4, San Si eon Valley Groundwater Basin: Pa e 1

- Re ardin all three reco ended actions that involve collaboration with the Ca bria CSD- is the issuance of permits a 'potential' action? I am wondering if the language should read "reflect ***the potential*** issuance of a small number of building permits…"
- The usage of the word 'temporary' in the third and fourth recommended actions is a little bit confusin . It refers to the pilot pro ra , but is confusin in the context that buildin s and permits are permanent not temporary. I suggest removing the word 'temporary' from the third and fourth recommended actions and simply refer to it as 'a small scale pilot program'. I think that calling it a 'pilot program' accurately conveys that it is not intended to be a permanent pro ra .

Table I-4, Santa Maria Valley Groundwater Basin, NCMA. Pa e 14

We can see how it would ake sense to end an ordinance that has not proven entirely necessary. However, will there be an additional ordinance to prevent backslidin ? I realize that ost all fixtures currently on the arket are low-flow, but it see s that in place of retrofit-on-sale it would be prudent to have an ordinance that si ply outlines the standards for fixtures in that basin.

Table I-5 Reco ended Levels of Severity, Wastewater Treat ent and Septic Syste s. Pa e 16. Can the reco ended actions be broken up by bordered rows to correspond to the re ion they are referrin to? It would be ore consistent with the for attin of Table I-4.

Fi ure II- Pa e, : The justified text ali n ent for the fi ure title is really bizarre lookin . Ali n left?

San Si eon Valley Groundwater Basin: Pa e 7: - The sentence "The primary constraints on water availability in the basin include physical limitations and potential water quality issues." Is repeated twice in the sa e para raph. (Second sentence and last sentence.)

San Si eon CSD- Pa e 8: - Is it possible to include the volu e of Title 22 water bein produced and distributed? It would be helpful to know the scale of the pro ra ri ht now and the anticipated volu e that would flow throu h a recycled water distribution syste .

Ca bria CSD, Pa e 9 - In the first sentence, chan e acrony *CCSD* back to read *Cambria CSD* for consistency with previous para raphs and references.

Old Valley Groundwater Basin, Pa e 40: - For clarity, the acrony *CAWO* should be included in parenthesis after the full spellin of the or anization na e in the first sentence of the section.

Bulleted List- Pa e 41: - Li it the usa e of acrony s by spellin out Cayucos Ce etery District, Paso Robles Beach Water Association. These acrony s appear only once in the entire section and are not necessary for brevity.

Pa e 41 42:

- The word *'buildout'* is intermittently hyphenated and not hyphenated. I'm not a grammar whiz, but it see s like this should probably be more consistent…
- The acronym 'NWP' is used on page 42, and should be introduced on page 41 *'Nacimiento Water Project (NWP)'*

Pa e 46, first sentence: - Update the tense of the first sentence 'plans to invest more than $2 million dollars…in 2014' –should it say *'beginning in 2014'* or *'planned'*?

Pa e 47 48 - The sentence *'Shallow alluvial deposits are typically more susceptible to drought impacts.'* Is stated in the first para raph on pa e 47 and repeated al ost identically in the last para raph of the section on pa e 48.

San Luis Obispo Valley Groundwater Basin- Edna Valley Sub-basin, pa e 48 - The sentences that describe *'primary constraints'* and *'Lowering groundwater levels'* are essentially repeated in the first two para raphs. It see s like the first paragraph captures the ideas well enough…

Pa e 52, last para raph:

- Can there be a different sentence to introduce the discussion about water quality and sea water intrusion? The first sentence of the para raph is repetitive with a sentence in the previous para raph.
- The sentence "Following the detection of evidence of seawater intrusion..." is repeated in two para raphs.
- The section uses *'sea water intrusion'* and *'seawater intrusion'* and should be ade consistent.

Pa e 15, Table I-4 – Atascadero Mutual Water Co pany (AMWC) is not listed as a water purveyor in the Atascadero sub-basin.

Table I-4. Add "Main Basin" after "Paso Robles Groundwater Basin". Under Recommended actions, add "Main" and remove "as a whole and for the Atascadero Sub-basin".

Table I-4. Add "Sustainable" before "Basin Management Plan" in each location.

Pa e 22, Table II-1 – AMWC is not listed as a water purveyor servin the unincorporated county. AMWC serves the entire City of Atascadero and portions of the adjacent unincorporated areas.
Pa e 29, 0: Naci iento Water Project. Update discussion to indicate that the Naci iento pipeline has been constructed and water deliveries be an in 2011. A table showin all subscribers and water allocations, includin surplus water still available for purchase would be helpful.

Pa e 61, Paso Robles Groundwater Basin

- Include the Quiet Title action as this lawsuit ay have an unknown i pact on ana e ent and possible allocations of water in the basin.
- Perennial yield for the entire basin is 89,700 AFY, outflows exceeded inflows by 2,400 AFY durin the period 1981 throu h 2011.
- Inclusion of Paso Water/Wastewater facility esti ates of 4,000 AF of reclai ed water for rechar e?
- Include the Paso Basin Model new updates and TODD illustration of areas of the basin in "red" vs. other areas. Also include rowth and no rowth odelin .

Pa e 66, Table II-15

- The recycled water supply created by the City of Atascadero wastewater treat ent facility (WWTF) is not shown on the table. On avera e, the City's WWTF recharges the Atascadero sub-basin by 1,500 acre-feet per year (afy).
- The notes to the table should identify that there is an additional 6,100 afy of surplus water available fro the Naci iento Water Project. So e of this surplus water can be utilized in the sub-basin to offset roundwater pu pin . The TCSD and AMWC are currently workin with the County to acquire nearly 1,120 afy of this surplus water.
- Table II-15 was created by co parin de and fi ures fro the Master Water Report Water Plannin Area (WPA) 1 with supply data fro the Atascadero Sub-basin. The boundary of WPA

1 is si nificantly lar er than the sub-basin boundary, and includes si nificant a ricultural roundwater pu pin outside the sub-basin. For this reason, the a ricultural de and of 10,620 afy shown for the sub-basin is rossly overstated. Actual a ricultural de and in the sub-basin per Todd (2009) pu pin update is on the order of 1, 50 afy, part of which beco es return flow.

- The rural de and is based on a de and factor of 1.7 afy/unit fro previous studies. The ost current odel by Geoscience Support Services uses a ore realistic de and factor of 0.75 afy/unit. Usin this factor, rural de and is conservatively 800 afy. Accordin Geoscience, of this a ount, 8 is indoor do estic water de and and returns to the basin throu h onsite septic syste s.
- Much of the a ricultural pu pin in the sub-basin is fro the underflow and not the Paso Robles for ation. This pu pin is by the a ricultural users adjacent to the Salinas River fro shallow, alluvial wells. A ore detailed accountin of this pu pin is warranted. Usin the DWR appropriation for this pu pin does not take into account the pu pin that is occurrin under the property owners' riparian rights.
- Underflow pu pin , whether unicipal or a ricultural, has no effect on roundwater in stora e in the Paso Robles for ation. This relationship between underflow pu pin and water stora e in the Paso Robles for ation ust be considered when akin deter inations on the i pacts of roundwater pu pin in the sub-basin. Underflow pu pin does have a li ited effect on rechar e into the Paso Robles for ation.
- Followin is a ore accurate representation of net pu pin in the Atascadero sub-basin, and includes pu pin fro the Salinas River underflow. But as described above, pu pin fro the underflow does not have an effect on roundwater stora e in the Paso Robles for ation, only the rate of rechar e. The table presents a very conservative, over-esti ate of the net pu pin in the sub-basin.

Demand (afy)	TCSD	AMWC	Paso	Ag	Rural	Total
Current, Paso For ation	680	2,15	0	605	800	**4,238**
Current, Underflow	665	, 72	,24	745	0	**8,025**
Recycled	(165)	(1,500)	0	0	0	**(1,665)**
NWP	(250)	(2,000)	0	0	0	**(2,250)**
Total	**930**	**2,025**	**3,243**	**1,350**	**800**	**8,348**

SUB-BASIN PERENNIAL YIELD = 16,400

Table II-16. The Paso Robles Groundwater Basin supply and de and nu bers need to atch the co puter odel update. This data is now available.

Table II-16. Since the Atascadero Sub-basin is handled separately, this table should include only the values for the ain basin.

Pa e 65, last para raph, second sentence - The statement, "An evaluation of the conceptualized aquifer syste used in the Basin Model Update was inconclusive as to whether the Rinconada Fault serves as a hydraulic barrier that separates the Sub-basin from the main Basin." is misleading. In fact, the investi ators of the Model Update project did not find any evidence to question the conclusion reached by Fu ro (2002) that the Sub-basin was indeed hydraulically separate and distinct, so they decided to carry the ori inal Fu ro conclusions forward. Accordin to the Basin Model Update by Geoscience Support Services, "The Ricconada Fault generally defines the entire eastern border of the Atascadero

Sub-basin, and hydraulically separates the confined aquifer associated with the Paso Robles For ation fro the rest of the roundwater basin (Fu ro and Cleath, 2002). Justification for this separation was supported throu h roundwater level trends on either side of the Rinconada Fault and the juxtaposition of water-bearin (i.e. Paso Robles For ation) with non-water bearin for ations (Monterey For ation) due to historic lateral displacement along the Rinconada Fault."

Pa e 66, first para raph, first sentence - The statement, "The Atascadero Sub-basin will be included in the Basin Mana e ent Plan and roundwater ana e ent district currently bein considered by the County and affected stakeholders." is incorrect. No decision has been reached whether the Sub-basin will be part of any future ana e ent district.

See revised Atascadero Sub-basin section incorporatin the above co ents and net pu pin calculations for the Sub-basin only. Adjusted for net pu pin , the LOS for the Atascadero Sub-basin re ains a LOS I.

Pa e 7 : Separate Paso Robles Main Basin and the Atascadero Sub-basin. Insert the followin :

Atascadero Sub-basin

1. Maintain LOS I in Atascadero Sub-basin.
2. Continue to support efforts to co plete and i ple ent a Sustainable Basin Mana e ent Plan.

Pa e 75: A end Table III-1 to reflect the two wastewater treat ent areas and flows within the District.

Te pleton CSD[8]				
Meadowbrook WWTP	5-11-2007	0.600	0.16	27
Paso Robles WWTP (9)	6-25-2011	0.44	0.220	50

Pa e 92: Update the section. The City of Paso Robles is in the process of constructin a new 5 MGD WWTP and plant syste start up is well underway.

Pa e 92: Revise the table to reflect the two wastewater treat ent areas and flows within the District.

Pa e 94: Revise table to include the two wastewater treat ent areas and flows within the District.

WRAC a enda packa e, Pa e 20. The rowth scenario projects that outflows would exceed inflows by 26,200 AFY.

WRAC a enda packa e, Pa e 28. The new e er ency water supply syste for Ca bria needs to be considered.

5005 EL CAMINO REAL • P.O. BOX 6075 • ATASCADERO, CA 93423 • (805) 466-2428

Atascadero Mutual Water Company

ESTABLISHED 1913

January 26, 2015

Mr. Brian Pedrotti, bpedrotti@co.slo.ca.us
County of San Luis Obispo
Department of Planning & Building

Subject: 2012-2014 Resource Summary Report

Dear Mr. Pedrotti:

We have had an opportunity to review a draft of the subject report and offer the following comments:

Page 15, Table I-4 – Atascadero Mutual Water Company (AMWC) is not listed as a water purveyor in the Atascadero sub-basin.

Page 22, Table II-1 – AMWC is not listed as a water purveyor serving the unincorporated county. AMWC serves the entire City of Atascadero and portions of the adjacent unincorporated areas.

Page 66, Table II-15

- The recycled water supply created by the City of Atascadero wastewater treatment facility (WWTF) is not shown on the table. On average, the City's WWTF recharges the Atascadero sub-basin by 1,500 acre-feet per year (afy).
- The notes to the table should identify that there is an additional 6,100 afy of surplus water available from the Nacimiento Water Project. Some of this surplus water can be utilized in the sub-basin to offset groundwater pumping. The TCSD and AMWC are currently working with the County to acquire nearly 1,120 afy of this surplus water.
- Table II-15 was created by comparing demand figures from the Master Water Report Water Planning Area (WPA) 13 with supply data from the Atascadero Sub-basin. The boundary of WPA 13 is significantly larger than the sub-basin boundary, and includes significant agricultural groundwater pumping outside the sub-basin. For this reason, the agricultural demand of 10,620 afy shown for the sub-basin is grossly overstated. Actual agricultural demand in the sub-basin per Todd (2009) pumping update is on the order of 1,350 afy, part of which becomes return flow.
- The rural demand is based on a demand factor of 1.7 afy/unit from previous studies. The most current model by Geoscience Support Services uses a more realistic demand factor of 0.75 afy/unit. Using this factor, rural demand is conservatively 800 afy. According Geoscience, of this amount, 38% is indoor domestic water demand and returns to the basin through onsite septic systems.
- Much of the agricultural pumping in the sub-basin is from the underflow and not the Paso Robles formation. This pumping is by the agricultural users adjacent to the Salinas River from shallow, alluvial wells. A more detailed accounting of this pumping is warranted. Using the

DWR appropriation for this pumping does not take into account the pumping that is occurring under the property owners' riparian rights.

- Underflow pumping, whether municipal or agricultural, has no effect on groundwater in storage in the Paso Robles formation. This relationship between underflow pumping and water storage in the Paso Robles formation must be considered when making determinations on the impacts of groundwater pumping in the sub-basin. Underflow pumping does have a limited effect on recharge into the Paso Robles formation.
- Following is a more accurate representation of net pumping in the Atascadero sub-basin, and includes pumping from the Salinas River underflow. But as described above, pumping from the underflow does not have an effect on groundwater storage in the Paso Robles formation, only the rate of recharge. The table presents a very conservative, over-estimate of the net pumping in the sub-basin.

Demand (afy)	TCSD	AMWC	Paso	Ag	Rural	Total
Current, Paso Formation	844	2,153	0	605	800	**4,402**
Current, Underflow	500	3,372	3,243	745	0	**7,860**
Recycled	(132)	(1,500)	0	0	0	**(1,632)**
NWP	(250)	(2,000)	0	0	0	**(2,250)**
Total	**962**	**2,025**	**3,243**	**1,350**	**800**	**8,380**

SUB-BASIN PERENNIAL YIELD = 16,400

Page 65, last paragraph, second sentence - The statement, "An evaluation of the conceptualized aquifer system used in the Basin Model Update was inconclusive as to whether the Rinconada Fault serves as a hydraulic barrier that separates the Sub-basin from the main Basin." is misleading. In fact, the investigators of the Model Update project did not find any evidence to question the conclusion reached by Fugro (2002) that the Sub-basin was indeed hydraulically separate and distinct, so they decided to carry the original Fugro conclusions forward. According to the Basin Model Update by Geoscience Support Services, "The Ricconada Fault generally defines the entire eastern border of the Atascadero Sub-basin, and hydraulically separates the confined aquifer associated with the Paso Robles Formation from the rest of the groundwater basin (Fugro and Cleath, 2002). Justification for this separation was supported through groundwater level trends on either side of the Rinconada Fault and the juxtaposition of water-bearing (i.e. Paso Robles Formation) with non-water bearing formations (Monterey Formation) due to historic lateral displacement along the Rinconada Fault."

Page 66, first paragraph, first sentence - The statement, "The Atascadero Sub-basin will be included in the Basin Management Plan and groundwater management district currently being considered by the County and affected stakeholders." is incorrect. No decision has been reached whether the Sub-basin will be part of any future management district.

Please consider the comments above as you prepare the final draft of the Resource Summary Report. Considering the above, it does not seem that a LOS III designation for the Atascadero sub-basin is appropriate at this time.

Respectfully yours,

John B. Neil, PE
General Manager

ECONOMIC STRATEGY PROJECT

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March 17, 2015

Mr. Brian Pedrotti
Department of Planning & Building
County of San Luis Obispo
976 Osos Street, Room 300
San Luis Obispo, CA 93408

Re: Public Draft of the 2012-2014 Resource Summary Report (RSR) of the Resource Management System (RMS)

Dear Brian,

Thank you for providing the BD&C Infrastructure Committee ("BD&C") members with this opportunity for review and input on your advance materials regarding the Resource Management System's biennial report update. We appreciate County Planning & Building's commitment of time and assistance in working with the EVC on these important matters.

The BD&C provides these comments regarding both technical accuracy of the reports, and addressing substantive recommendations for your consideration as "recommended actions". We welcome the opportunity to discuss any of these comments in greater detail with you.

Overall Comments

1. The reorganization of the document by resources is an excellent improvement, makes the document more readable and gives a better picture of the current situation regarding resources in our county.

2. We suggest that each of the major sections would benefit from a more thorough discussion of the "strategies" (long term approach) and "tactics" (short term approach) that may be taken by the

County to increase the availability of resources in the Class II and III categories. Discussion of options such as identification of funding priorities using County funds and or other County financial resources, prioritization of staff effort to obtain grant funding for identified resources, creation of CFD/EIFD or other Districts to fund identified infrastructure & resource needs, funding a "grant writer" position in the County paid for by the County with a portion of the costs shared by the Community Service Districts ("CSD's") should be addressed.

Water Supply

1. It occurs to us that the issues raised regarding water severity levels cross multi-jurisdictional lines. The update recognizes the need for Basin Management Plans for the Los Osos and Paso Robles regions, but doesn't make mention of the South County basin. We believe adding reference to supporting similar efforts on a Basin Management Plan for the South County would be a "General recommendation" item.

2. Regarding Santa Maria Valley Groundwater Basin (Nipomo Mesa), and building upon your recommendation #2, we would suggest you add an additional item #5 as follows:

> "5. Sponsor a stakeholders' meeting/discussion regarding multi-jurisdictional cooperation on developing a South County Basin Management Plan that would include both the Nipomo Community Services District, and the Five Cities municipal and Oceano agencies (Northern Cities Management Area), in collaborative groundwater management planning and practices."

3. Encourage private industry involvement in a stakeholders' meeting/discussion by reaching out to the Home Builders Association, Economic Vitality Corporation and similar organizations.

4. We are surprised to learn the CSD's reporting to the County is voluntary. In light of the issues identified in this report it would seem that reporting should be mandatory in order for the "big picture" to be accurate and up to date.

5. Our understanding from the prior studies (2009-2012) was that the Atascadero sub-basin was clearly identified as separate from the Paso Robles basin. It was also clearly stated at that time the basin was not undersupplied as there was adequate resource available from ground water, Atascadero Mutual Water Company conservation programs and from the water company's supply from the Nacimiento Water Project. Can you please confirm whether this is the case?

6. Why is County funding for the Nipomo CSD only recommended in conjunction with conservation? Why not other supply sources?

Waste Water

1. Why was the standard for measurement changed from peak flow to monthly average flow?

Roads and Interchanges

1. Table IV-2, and Page 106, we recommend moving Price Canyon Road to Level Of Severity II, as it is projected to reach LOS "D" service by 2019 (5 years).

2. Regarding widening of the South Broad Street-Hwy 227-Price Canyon Road segments (that serve as an alternative Hwy 101 morning and evening commuter route to SLO) we recommend convening a multi-agency working group of Cities (SLO and Five Cities), the Council of Governments and Caltrans representatives to explore a program for phased widening and intersection control to accommodate the increasing volume of commuters on these roadways.

3. Regarding Tank Farm Road west of Hwy 227, we recommend convening a multi-agency working group of San Luis Obispo City, San Luis Obispo County and Council of Governments representatives to explore a joint funding program for phased widening and intersection control along this heavily impacted roadway.

4. Although not mentioned in this report, the Santa Barbara Road/US 101 interchange capacity does not appear to be adequate for implementation of the existing Eagle Ranch lots or the reconfiguration of the lots upon annexation to the City of Atascadero.

Again, we appreciate the opportunity to share these perspectives with the County. The BD&C believes these suggestions will serve in advancing and successfully completing critical infrastructure needs, and thereby directly supporting shared regional economic goals.

[redacted]

Vic Montgomery, Architect
BD&C Infrastructure Committ

atson Planning
mmittee

cc: Eric Schwefler, Chair, EVC Board of Directors
Kris Vardas, Economic Strategy Chair, EVC Board of Directors
Michael E. Manchak, EVC
Christine Rogers, EVC
EVC Board of Directors
Leonard Grant, BD&C Co-Chair
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March 6, 2015

Via Email Only

tcarmel@carnaclaw.com

Mr. Brian Pedrotti, AICP
Planning and Building Department
bpedrotti@co.slo.ca.us

RE: DRAFT RESOURCES SUMMARY REPORT COMMENTS

- *Cambria Community Services District ("District")*

Dear Mr. Pedrotti:

We appreciate the opportunity to review the County's draft 2012/2014 Resource Management System (RMS) biennial report. Please see the District's comments and proposed changes in the attached redlined document.

Please let me know if you have any questions or concerns regarding the changes. Your attention to this matter is appreciated.

Sincerely,

CARMEL & NACCASHA LLP

Timothy J. Carmel
District Counsel

TJC/lmh
Encl.
Cc: Jerry Gruber, General Manager
Robert Gresens, District Engineer
Monique Madrid, Administrative Services Officer

2012 -2014

Resource Summary Report

San Luis Obispo County General Plan

DRAFT

Board of Supervisors

Frank R. Mecham, District 1
Bruce S. Gibson, District 2
Adam Hill, District 3
Lynn Compton, District 4
Debbie Arnold, District 5

Staff

James A. Bergman, Planning and Building Director
Kami Griffin, Assistant Planning and Building Director
Mike Wulkan, Supervising Planner
Brian Pedrotti, Planner III – Project Manager

January 7, 2015

Unincorporated Areas	104,324	105,452	105,734	108,061	112,565	118,212	123,914	129,768
Population In Group Quarters	17,006	17,006	17,006	17,006	17,006	17,006	17,006	17,006
Total County	269,637	272,859	273,664	280,522	289,119	299,898	310,779	321,953

Source: SLOCOG, 2014

Building Permits for Residential Development

Table 1-2 shows the number of building permits 'finaled" for new (or replaced) single family residences in the unincorporated County between 2000 and 2013, divided between those issued in urban versus rural areas. As shown in Table 1-2 and Figure 1-1, urban areas of the unincorporated County have received the largest proportion of new residences, an average of 59% urban versus 41% rural over the past 13 years. The year 2013 appears to be an anomaly with only 28% of new residences constructed in the urban areas.

Table 1-2 •• Building Permits "Finaled" For Single Family Residences In the Unincorporated County, 2000 • 2013

Year	Rural	Urban	Total	% of Urban Dwelling Units
2000	277	493	770	64%
2001	230	651	881	74%
2002	366	521	887	59%
2003	327	541	868	62%
2004	437	683	1120	61%
2005	372	661	1033	64%
2006	385	521	906	58%
2007	283	512	795	64%
2008	304	422	726	58%
2009	54	72	126	57%
2010	93	144	237	61%
2011	89	99	188	53%
2012	69	113	182	62%
2013	222	86	308	28%
TOTAL	3,508	5,519	9,027	59%

Source: San Luis Obispo County Department of Planning and Building

Summary of Recommended Levels of Severity and Recommended Actions for 2012-2014

The LOS recommended for each resource are summarized below along with the recommended actions. There are no LOS established for cities.

Water Supply and Systems

Table 1-4 •• Recommended Levels of Severity - Water Supply

Groundwater Basins and Affected Water Purveyors	Recommended LOS	Recommended Actions
Pico Creek Valley Groundwater Basin *Water Purvevors* San Simeon CSD	III	Continue to support efforts to improve water conservation, the efficient use of water, and water re-use. Continue to collect development impact fees for the construction of water supply infrastructure. Support efforts to develop sustainable supplemental sources of water.
San Simeon Valley Groundwater Basin Santa Rosa Valley Groundwater Basin *Water Purveyors* Cambria CSD	III III	LOS III to remain in place. Collaborate with the Cambria Community Services District to address issuance of a limited number of intent-to-serve letters and building permits based on the aggressive water conservation program developed by Maddaus. Collaborate with the Cambria Community Services District to revise the County Growth Management Ordinance to reflect the issuance of a ~~small~~ limited number of building permits for new development as part of a temporary pilot program. ~~Collaborate with the Cambria Community Services District to prepare a CEQA determination, with the County acting as a Responsible Agency, that identifies the potentially significant impacts of a temporary, small scale pilot program to issue intent-to-serve letters and~~

Table 1-4 •• Recommended Levels of Severity - Water Supply

Groundwater Basins and Affected Water Purveyors	Recommended LOS	Recommended Actions
		~~building permits for new development.~~
Cayucos Valley Groundwater Basin Old Valley Groundwater Basin *Water Purvevars* CSA OA Morro Rock Mutual Water Co. Paso Robles Water Assoc.	None None	Continue to support efforts to improve water conservation, the efficient use of water, and water re-use. Continue to collect development impact fees for the construction of water supply infrastructure. Support efforts to develop sustainable supplemental sources of water.
Los Osos Valley Groundwater Basin *Water Purveyors* Los Osos CSD S&T Mutual Water Co. Golden State Water Co.	III	LOS III to remain in place. Continue to support efforts to complete and implement a Basin Management Plan. Support efforts to complete the wastewater project.
San Luis Obispo Valley Groundwater Basin – San Luis Sub-basin San Luis Obispo Valley Groundwater Basin – Avila Valley Sub-basin *Water Purveyors* Avila Beach CSD Avila Valley Mutual Water Co. San Miguelita Mutual Water Co. CSA 12	None None	Support efforts to determine the safe yield of the Avila Valley Sub-basin
Santa Maria Valley Groundwater Basin - Northern Cities Management Area Santa Maria Valley Groundwater Basin - Nipomo Mesa Management Area *Water Purveyors* Nipomo CSD Woodlands Mutual Water Co. Oceano CSD	None III	Consider ending the Title 8 retrofit-upon-sale ordinance in the NMWCA. The program has run for four years and approximately 5% of homes have needed retrofitting. Follow the progress of the Supplemental Water Alternatives Evaluation Committee. Coordinate any needed County actions such as an AB 1600 study to quantify the

Water Purveyors Serving the Unincorporated County

Water purveyors serving the unincorporated county are summarized on Table 11-1 and shown on Figure 11-1.

Table 11·1 - Water Purveyors Serving the Unincorporated County

Community	Water Purveyors	Approx. Population Served (2014)	2012-13 Water Deliveries (AFV)[4]	2013-14 Water Deliveries (AFV)
Avila Beach Avila Valley	Avila CSD Avila Valley Mutual Water Co. San Miguelita Mutual Water Co.	450 112 1.200	(1) 35.9 (1)	86.6 48 .1 179.S
Cambria	Cambria CSD	6,031	~~(1)~~743.5*	~~555.1~~622.6*
Cayucos	CSA OA Morro Rock Mutual Water Co. Paso Robles Beach Water Assoc.	2,185	110.1 115.6 151.2	112.0 115.4 149 .9
Edna Valley	Golden State Water Co.	1,960	297.9	286.8
Heritage Ranch	Heritage Ranch CSD	3,500	533.6	461.3
Los Osos	Los Osos CSD Golden State Water Co. S&T Mutual Water Co.	7,086 8,824 (1)	670.8 675.5 (1)	645.1 649.8 (1)
Nipomo	Nipomo CSD Woodland Mutual Water Co.	12,484 1,200	2,376.4 864.5	2,517.0 849.3
Oceana	Oceana CSD	7,294	829.1	832.8
Santa Margarita	CSA 23	1,265	156.1	157.2
San Miguel	San Miguel CSD	2,413	309.8	312 .1
San Simeon	San Simeon CSD	462	(1)	72.1
Shandon	CSA 16	1,260	109.7	142.3
Templeton	Templeton CSD	6,885	(1)	1,344.3

Source:San Luis Obispo County Flood Control and Water Conservation District, 2014
Notes:
1. No data reported.
* For the period between July 1 through June 30

[4] Acre feet per year. An acre-foot is 325,851.4 gallons.

Water Resources

The following information regarding water resources serving the unincorporated county was summarized from the 2012 San Luis Obispo County Master Water Report which is available in its entirety at the County's[5] website or based on more recent information when such information was available:

http://www.slocountywater.org/site/Frequent%20Downloads/Master%20Water%20Plan/

Groundwater Resources

Groundwater basins are summarized on Table 11-2 and shown on Figure 11-2.

Table 11·2 - Groundwater Basins

Location	Groundwater Basins/ Sub-basins	Safe Basin Yield (AFY)	Notes
San Simeon	San Carpaforo Valley	(1)	Rural and agricultural users only.
	Arroyo De La Cruz Valley	1,244	Rural and agricultural users only.
	Pico Creek Valley	120	Users include San Simeon CSD, Hearst Ranch and overlying users.
Cambria	San Simeon Valley	1,040	Users include Cambria CSD and overlying users.
	Santa Rosa Valley	2,260	Users include Cambria CSD and overlying users.
	Villa Valley	1,000	Rural and agricultural users only. Department of Water Resources estimate of safe yield from 1958. There has been no subsequent basin study to confirm or update this estimate.
Cayucos	Cayucos Valley	600	Morro Rock Mutual Water Company and Paso Robles Beach Water Association service areas overlie a portion of the basin; however, these purveyors do not pump from the Cayucos Valley basin. Department of Water Resources estimate of safe yield In 1958. There has been no subsequent basin study to confirm or update this estimate.
	Old Valley	(1)	Within the watershed of Whale Rock Reservoir. Users downstream of Whale Rock reservoir include members of the Cayucos Area Water Organization (CAWO), which include Morro Rock Mutual Water Company (Morro Rock MWC), Paso Robles Beach Water Association (PRBWA). County Service Area lOA (CSA lOA), the Cayucos Cemetery District (CCD), and two landowners.
	Toro Valley	532	Basin water users include Chevron (with agricultural tenants), and overlying residential and agricultural users.
Morro Bay	Morro Valley	1,500	Basin groundwater users include the City of Morro Bay, a cement plant, a small public water system (mobile home park), and residential and agricultural overlying users.
	Chorro Valley	2,210	Users include the City of Morro Bay, San Luis Obispo County, California State Parks, California State Polytechnic University, California National Guard, California Men's Colony, and residential and agricultural overlying users.
Los Osos	Los Osos Valley	3,200	Users include Golden State Water Company, S&T Mutual, the Los Osos Community Services District, and overlying private well users.

[5] "County" as used in this RSR includes the San Luis Obispo County Flood Control and Water Conservation District.

strategies are likely the most feasible options to consider for San Simeon CSD's future water supply:

- Recycled water
- Groundwater supply sources (other than Pico Creek Valley Groundwater Basin)
- Desalination

The Arroyo De La Cruz Groundwater Basin is a possible option for a future water supply. Unfortunately, published hydrogeologic information for this basin is compiled from older reports and may not be representative of current conditions. The safe basin yield should be determined as part of any investigation of this basin as a future water supply.

San Simeon CSD could also implement a desalination project (~~similar to one being constructed by Cambria CSD~~). The implementation challenges would be similar to those experienced by ~~Cambria CSD~~other agencies seeking to desalinate seawater within California's coastal zone areas.

Comment [TJC1]: The CCSD plant uses brackish water, which includes indirect reuse of percolated treated wastewater effluent. Recommend striking this comparison due to San Simeon not having percolation basins.

Table 11-7 – Pico Creek Valley Groundwater Basin
Existing and Forecasted Water Supply and Demand

Demand	San Simeon CSD	Agriculture	Rural
Current Demand (AFY)	72.1[1]	70[3]	20[3]
Forecast Demand In 15 Years (AFY)	71.1	65	35
Forecast Demand in 20 Years (AFY)	71.9	63.3	40
Buildout Demand (30 Or More Years) (AFY)	250[2]	10-60[3]	50[3]
Supply			
Pico Creek Valley Basin (AFY)	120	Uncertain[4]	Uncertain[4]
Water Supply Versus Forecast Demand	Water demand projected over 15 years will equal or exceed the estimated dependable supply.		

Sources: Water System Usage forms: July 2012 – June 2013; July 2013 – June 2014, San Luis Obispo County Master Water Report, 2012, Table 4.54

Notes:
1. See Table 11-1. Demand fluctuates due to changes in tourism. Data for agriculture and rural are from 2012.
2. Most recent master plan forecasts a build-out demand of 224 AFY, but San Simeon CSD's current build-out demand estimate is 250 AFY.
3. Agricultural and rural demand calculations do not account for livestock operations, and likely underestimates actual water demands.
4. Seventy (70) AFY of Pico Creek livestock and domestic usage was reported by Hearst Holdings Inc. to the SWRCB in June 2010.
5. Population within the San Simeon area is expected to decline slightly over the next 30 years.

The groundwater basin is considered an unreliable source within the timeframes prescribed by the LOS criteria because:

- Current estimated demand from urban, rural and agricultural users (162.1 AFY) exceeds the safe yield of the basin (120 AFY).

- Forecast demand from all sources in 30 or more years is expected to be between 310 and 360 AFY which exceeds the safe yield of the basin (120 AFY).
- The combination of seawater intrusion along with lowering groundwater levels during the dry season or times of drought.

Water demand projected over 15 years will equal or exceed the estimated dependable supply. Recommended Level of Severity III.

San Simeon Valley and Santa Rosa Valley Groundwater Basins

San Simeon Valley Groundwater Basin

Water users in the basin include the Cambria CSD (discussed below under the Santa Rosa Valley Groundwater Basin) and overlying rural and agricultural users. The primary constraints on water availability in the basin include physical limitations and potential water quality issues. The State Water Resources Control Board (State Board) allows the Cambria CSD a maximum extraction of 1,230 AFY in the San Simeon Valley Groundwater Basin and a maximum dry season extraction of 370 AF (Cambria CSD Water Master Plan (WMP), 2008). Although the actual dates will vary each year depending on creek flows and rainfall occurrence, the dry season generally spans from May through October. In general, groundwater levels in the basin are typically highest during the wet season, steadily decline from these levels during the dry season, and recover again to higher levels during the next wet season. The primary constraints on water availability in the basin include physical limitations and potential water quality issues.

Santa Rosa Valley Groundwater Basin

Water users in the basin include the Cambria CSD and overlying rural and agricultural users. According to the 2012 Master Water Report, the primary constraints on water availability in the basin include physical limitations and potential water quality issues. The State Board allows the Cambria CSD a maximum extraction of 518 AFY in the Santa Rosa Valley Groundwater Basin and a maximum dry season extraction of 260 AF (defined in the diversion permit as the period from May 1 through October 31, Cambria CSD WMP, 2008). ~~The California Coastal Commission defines the Santa Rosa Creek dry period as July 1to November 20.~~ In general, groundwater levels in the basin are typically highest during the wet season, steadily decline from these levels during the dry season, and recover again to higher levels during the next wet season. Because of these limitations, ~~the groundwater basin is considered an unreliable source to meet existing demands during the dry season~~the CCSD has used the Santa Rosa aquifer as a means to augment its primary San Simeon aquifer supply during the dry season, and as an emergency backup supply.

Due to the dry season supply limitations of the San Simeon and Santa Rosa Valley Groundwater Basins, an alternative supply is necessary to meet supply needs in response to droughts. ~~existing seasonal deficits and future demands. Water conservation measures have been implemented and there is minimal opportunity to further reduce water demands. Further mandatory or emergency conservation would be used to off-set an emergency or reliability supply, not to support growth.~~ Two water management strategies are ~~likely the most feasible options to consider for~~being utilized by the Cambria CSD~~'s future water supply~~:

- ~~Desalination~~Brackish water desalination, which includes advanced treatment to meet Title 22 indirect reuse regulations
- ~~Recycled water~~Aggressive Water Conservation

~~To meet the additional water supply needs and t~~To increase water supply reliability, the Cambria CSD has constructed ~~a seawater desalination plant~~an emergency water supply facility, which can ~~to~~ produce up to ~~602~~250 AFY. The plant will

~~o~~operate during the dry season to augment supply during that period of high demand. A ~~decentralized recycled water program is also planned, with an estimated 180 AFY made available for unrestricted irrigation use~~long term water supply EIS is also underway by the Army Corps of Engineers to further assess various supply alternatives, including means to incorporate the emergency project facilities. Other water management strategies include further conservation and land use management (includes low impact development and rainwater harvesting).

Table 11·8 •• San Simeon Valley and Santa Rosa Valley Groundwater Basins Existing and Forecasted Water Supply and Demand

Demand	Cambria CSD	Agriculture	Rural
Current Demand (AFY)[1]	~~555.1~~744	640	100
Forecast Demand in 15 Years (AFY)	~~570.7~~836-909	1,065	160
Forecast Demand in 20 Years (AFY)	~~583.2~~836-909	1,206.7	180
Buildout Demand (30 Or More Years) (AFY)	~~1,009 - 1,514~~836-909[2]	740-1,490	190-220
Supply			
San Simeon Valley Basin (AFY)	1,230	Uncertain	Uncertain
Santa Rosa Valley Basin (AFY)	518	Uncertain	Uncertain
Total Supply:	1,748	Uncertain	Uncertain
Water Supply Versus Forecast Demand	Water demand for the basins projected over 15 years will likely equal or exceed the estimated dependable supply. [3] [4]		

Sources: Water System Usage forms: July 2012 – June 2013; July 2013 – June 2014, San Luis Obispo County Master Water Report, 2012, Table 4.55

Notes:

1. See Table 11-1. Current demand data for agriculture and rural are from 2012. Cambria CSD data is production totals for July 2012 through June 2013.
2. ~~The low end of the demand range for Cambria CSD represents maintaining current conservation practices and is the lowest demand scenario from the district's water master plan~~From the CCSD's Urban Water Management Plan, Tables 3-9 and 3-12. The upper range represents estimated demand totals plus 8% unaccounted water (distribution system and meter losses). The lower range represents demand totals with no system losses.
3. Although the existing annual supply and demand indicates a surplus, the dry season extraction limit sometimes creates a seasonal supply deficit.
4. It is uncertain whether an agricultural or rural supply deficit exists. Future studies should determine which groundwater basins are used by the agricultural and rural water users and update future demand estimates.

Because of the limitations on dry weather extractions, the San Simeon Valley and Santa Rosa Valley Groundwater Basins are considered an unreliable source within the timeframes prescribed by the LOS criteria. Therefore, water demand projected over 15 years will likely equal or exceed the estimated dependable supply. Recommended Level of Severity III

San Simeon/Cambria Area Water Systems

San Simeon CSD

San Simeon CSD has considered upgrading its wastewater treatment facility to use the treated effluent

as recycled water for landscape irrigation and possibly commercial uses (not for

seawater intrusion barrier). By July 2012, the facility was producing Title 22 recycled water, but it will only be available to commercial trucks that connect to an on-site tank. The long-term plan is to construct a recycled water distribution system.

No significant water system limitations were identified. No recommended Level Of Severity.

Cambria CSD

In an effort to enhance Cambria's major water and wastewater infrastructure and other key projects that protect the safety and quality of life for Cambrians, the CCSD has prioritized a number of Capital Improvement Projects (CIP) as well as the non-CIP Buildout Reduction Program (BRP). In 2014, the Cambria CSD completed several significant projects to improve upon its water supply reliability. These included an Emergency Water Supply Project that utilizes brackish water from the lower San Simeon Creek aquifer, rehabilitation of its SR-3 well and associated wellhead treatment plant, and the completion of a non-potable water fill station using SR-1 well. These are briefly described in the paragraphs that follow.

EMERGENCY WATER SUPPLY PROJECT

During 2014, the Cambria CSD completed

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~~The CSD continues to pursue~~ construction of an emergency water supply by treating brack~~s~~ish groundwater. The ~~water will go through~~project's advanced water treatment provides several stages of treatment to remove solids, salt, organic chemicals and other contaminants so that it is safe to drink. ~~It will then be re-injected into the aquifer's freshwater supply~~To meet Title 22 indirect reuse criteria, the highly treated water is injected into the Cambria CSD's San Simeon well field where it must travel at least 60 days before being pumped by the existing well field pumps. The brackish water ~~to be~~being treated is a combination of creek underflow, percolated wastewater treatment plant effluent, and a mix of freshwater and seawater that is within a deeper saltwater wedge. The extracted brackish water will have salt concentrations much lower than that of pure seawater. The project's intake well and treatment plant is ~~will be at least~~located about one-half mile inland from the ocean.

The San Simeon Creek Road facility ~~will~~ is operational and can produce approximately 300 gallons per minute of potable water. This is about 1.32 acre-feet per day or nearly 40 acre-feet per month. The plant is expected to run mainly during the dry months, supplying about 240 acre-feet of water in a six- month dry season. This is about one-third of the community's normal water consumption for a full year. The new facility was built under an Emergency Coastal Development Permit issued by the County, which limits its operation to occur only during a Stage 3 Water Shortage Emergency. The Cambria CSD is currently completing a regular coastal development permitting process with the intention of being able to more proactively operate the facility to prevent such future conditions from occurring.

Well SR-3 Rehabilitation. The Cambria CSD replaced its well pump for SR-3 well along the Santa Rosa Creek aquifer while also separating its discharge piping from its lower SR-1 well system. This allowed for only the SR-3 well discharge to enter into and be treated by the existing Filtronics iron and manganese removal filter. As part of this effort, the CSD's mothballed Filtronics plant was also rehabilitated and made operational. The sole use of SR-3 also placed the potable well water extraction point for the lower Santa Rosa aquifer water more upgradient from an MtBE plume that

was discovered in 2000. The operation of SR-3 well, coupled with monitoring for MtBE (which was also found to be non-detectible), allowed access to approximately 114 acre-feet of deeper groundwater that was not otherwise available to the CSD's only other operational Santa Rosa aquifer well (SR-4 Well, which is located much further up gradient along the aquifer).

Conversion of SR-1 Well for Non-potable Use. The Cambria CSD replaced its SR-1 well pump while also separating its discharge from the potable supply system. The SR-1 discharge was rerouted to non-potable polyethylene storage tanks installed at the Cambria CSD's Rodeo Grounds Road facility. Separate fill stations were installed for non-potable water use. The new non-potable fill stations replaced ones that had been previously in use at the CSD's San Simeon Creek Road property.

~~No significant water system limitations were reported.~~ No recommended change in the Level ~~Of~~of Severity.

Cayucos Area Water Supply and Systems

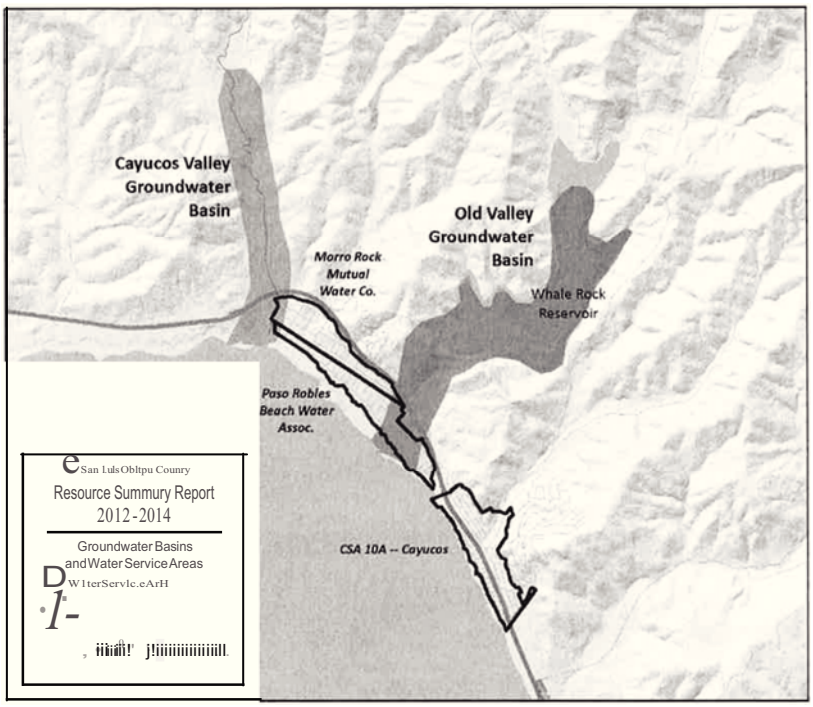

Figure 11-5 – Groundwater Basins, Surface Water and Water Purveyors in the Cayucos Area

Cayucos Valley Groundwater Basin

Constraints on water availability in this basin include both physical limitations and water quality issues. Water level and well capacity declines during drought will limit the availability of the resource, while in the lower valley area; sea water intrusion will be the primary constraint.

The Morro Rock Mutual Water Company and Paso Robles Beach Water Association service areas overlie a portion of the basin; however, these purveyors do not pump from the Cayucos Valley basin. No recommended Level Of Severity.

Old Valley Groundwater Basin

Basin groundwater users downstream of Whale Rock reservoir include members of the Cayucos Area Water Organization, which include Morro Rock Mutual Water Company, Paso Robles Beach Water Association, CSA lOA, the Cayucos Cemetery District, and two landowners. The combined groundwater and Whale Rock Reservoir surface water allocation for CAWO in Old Valley is 600 AFY, distributed as follows:

San Simeon Valley and Santa Rosa Valley Groundwater Basins (Cambria)

1. LOS III to remain in place.

2. Collaborate with the Cambria Community Services District to address issuance of a limited number of intent-to-serve letters and building permits based on the ~~aggressive water conservation program developed by Maddaus~~continued use of a demand offset conservation program to offset new demands from any new water connections.

3. Collaborate with the Cambria Community Services District to revise the County Growth Management Ordinance to reflect the issuance of ~~a small~~an allowable number of building permits for new development ~~as part of a temporary pilot program~~.

4. Collaborate with the Cambria Community Services District to prepare ~~a CEQA determination, with the County acting as a Responsible Agency, that identifies the potentially significant impacts of a temporary, small scale pilot program to issue intent- to-serve letters and building permits for new development~~and obtain a regular coastal development permit for its recently completed Emergency Water Supply Project along the lower San Simeon Creek aquifer.

Cayucos Valley and Old Valley Groundwater Basins (Cayucos)

1. Support efforts to secure an alternative supply as a reliability reserve, perhaps through the acquisition of an additional allocation from the Nacimiento Water Project.

Los Osos Groundwater Basin

1. LOS III to remain in place.

2. Continue to support efforts to complete and implement a Basin Management Plan.

3. Support efforts to complete the wastewater project.

San Luis Obispo Valley Groundwater Basin

1. Support efforts to determine the safe yield of the Avila Valley Sub-basin.

Santa Maria Valley groundwater Basin (Nipomo Mesa Area)

1. Consider ending the Title 8 retrofit-upon-sale ordinance in the NMWCA. The program has run for four years and approximately 5% of homes have needed retrofitting.

2. Follow the progress of the *Supplemental Water Alternatives Evaluation Committee.* Coordinate any needed County actions such as an AB 1600 study to quantify the costs and benefits of the identified supplemental water project for groundwater users outside the Nipomo CSD.

3. Collaborate with the Nipomo CSD and other stakeholders to assist in their efforts to address area wide water issues.

4. Continue to help fund area wide water conservation through the fee on new construction.

Paso Robles Groundwater Basin

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March 3, 2015

Via Email Only

tcarmel@carnaclaw.com

Mr. Brian Pedrotti, AICP
Planning and Building Department
bpedrotti@co.slo.ca.us

RE: DRAFT RESOURCES SUMMARY REPORT COMMENTS

- *Cayucos Sanitary District*

Dear Mr. Pedrotti:

We appreciate the opportunity to review the County's draft 2012/2014 Resource Management System (RMS) biennial report. Please see the Cayucos Sanitary District's ("District") comments and proposed changes in the attached redlined document.

Please let me know if you have any questions or concerns regarding the changes. Your attention to this matter is appreciated.

Sincerely,

CARMEL & NACCASHA LLP

Timothy J. Carmel
District Counsel

TJC:li
Encl.
Cc: Richard Koon

Cayucos Sanitary District

The Cayucos Sanitary District (CSD) operates a wastewater collection system that serves the community of Cayucos. By agreement, C~~ayucos~~ SD is allotted 0.721 MGD ~~-~~of the Morro Bay/CSD treatment plant capacity which has a design capacity of 2.36 MGD. Current (2014) average daily flows from the C~~ayucos~~ SD and the City of Morro Bay (population 10,136) are 0.964 MGD, or 41% of design capacity.

One discharge violation was reported for the period of 2012-2014. Root intrusion caused a spill of approximately 70 gallons; no surface water bodies were affected.

The CSD and City of Morro Bay are in the process of replacing the existing wastewater treatment plant. CSD is evaluating options, including constructing a plant with Morro Bay in the Morro Valley, expanding the California Men's Colony wastewater treatment plant, and constructing a small package tertiary treatment plant in Cayucos. The new plant will be designed to treat to tertiary standards and will provide recycled water for beneficial reuse. It is anticipated that the plant will be operational within five (5) years.

~~The City of Morro Bay and the CSD are in the process of upgrading the wastewater treatment plant to full secondary treatment and to provide tertiary filtration capacity of 1.5 million gallons per day. The tertiary filtered effluent would meet standards for disinfected secondary recycled water and as such could be used for limited beneficial uses.~~

~~At its meeting of January 10, 2013, the California Coastal Commission voted to deny the Coastal Development Permit (CDP) for construction of an upgraded wastewater treatment plant at its existing location. In summary, the basis for denial included: Local Coastal Plan - Zoning inconsistency, failure to avoid coastal hazards, failure to include a sizable reclaimed water component and the project is located within an LCP-designated sensitive view area. At present (November, 2014) the City and CSD are considering different locations for the wastewater treatment plant (water reclamation facility). Once a preferred site is chosen a facilities master plan will be prepared which will serve as the basis for environmental review and permitting. The tentative completion date for the new facility is the fall of 2017.~~ In the meantime, based on the projected growth in population within the CSD service area, the existing ~~-~~plant is expected to operate well below capacity for the next five years or more. No levels of severity are recommended for either collection or treatment.

Table III-4 -- Cayucos Sanitary District -- Recommended Levels of Severity for Wastewater Treatment[1]

2014 Service Area Population	2014 Average Daily Flow (MGD)	2020 Service Area Population	2020 Estimated Average Daily Flow (MGD)	Design Flow[~~2~~1] (MGD)[~~3~~2]	Percent of Design Flow In 2020	Recommended Levels of Severity
12,710	0.964	12,825	0.973	2.36	41%	None

Sources: San Luis Obispo County Department of Public Works, 2014; Central Coast RWQCB, 2014; SLOCOG, 2014

Notes:

1. The table reflects combined service areas and wastewater flows of CSD and the City of Morro Bay.
~~1.~~2. Design Flow = average daily dry weather flow in million gallons per day.

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~~2.~~3. MGD = Million gallons per day

Golden State
Water Company
A Subsidiary of American States Water Company

February 13, 2015

VIA EMAIL to: bpedrotti@co.slo.ca.us

Mr. Brian Pedrotti, AICP, Project Manager
San Luis Obispo County Planning & Building Department
976 Osos Street
San Luis Obispo, CA 93408

Subject: Public Draft 2012-2014 Resource Summary Report

Dear Mr. Pedrotti:

Golden State Water Company (GSWC) appreciates the opportunity to comment on San Luis Obispo County's Public Draft 2012-2014 Resource Summary Report (RSR), dated January 7, 2015. In commenting on the draft RSR, we wish to bring to your attention some relevant information which may not have been available to San Luis Obispo County (County). In light of this information, the County may wish to reconsider the draft RSR findings with respect to the status of water supply conditions in the Edna Valley sub-basin.

As you may know, GSWC operates a water system in the San Luis Obispo Valley groundwater basin, specifically within the Edna Valley sub-basin portion of this groundwater basin. And, groundwater is the sole source of supply to GSWC's Edna Valley system and customers.

California's Sustainable Groundwater Management Act, which was enacted in late 2014, applies to 127 high and medium priority groundwater basins, which account for approximately 96 percent of groundwater use in California. This includes the San Luis Obispo Valley groundwater basin, which has been ranked by the State of California Department of Water Resources (DWR) as a medium priority basin (see http://www.water.ca.gov/groundwater/casgem/pdfs/CASGEM_BasinPrioritization_S-CentralRegion.pdf).

It is worth noting that in designating the San Luis Obispo Valley groundwater basin as a medium priority basing, DWR includes a comment on groundwater overdraft conditions associated with the basin (see http://www.water.ca.gov/groundwater/casgem/pdfs/lists/SCRO_BasinName_05262014.pdf). The Sustainable Groundwater Management Act defines sustainable groundwater management as "the management and use of groundwater in a manner

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that can be maintained during the planning and implementation horizon without causing undesirable results." Undesirable results include chronic lowering of groundwater levels (not including overdraft during a drought if a basin is otherwise managed). Indeed, static (i.e., non-pumping) groundwater levels in GSWC wells in the Edna Valley sub-basin portion of the San Luis Obispo Valley groundwater basin have declined significantly over the last 50 years and in particular during the last 20 years. And, these declines appear to be chronic, as opposed to temporary (see attached groundwater levels chart).

The draft RSR notes that the reliability of the Edna Valley sub-basin is uncertain in part because future demand associated with rural and agricultural users in the sub-basin is unknown. However, despite the agricultural water use in the Edna Valley, the draft RSR states that the relatively small population served when compared with the safe yield of the aquifer suggests that the sub-basin will remain a reliable source and therefore no level of severity is recommend. That the draft RSR seems to indicate no resource deficiency exists within the Edna Valley sub-basin, appears to contrast with the DWR's designation of the San Luis Obispo Valley groundwater basin as a medium priority basin. In addition, DWR's ranking is consistent with the significant decline in, or lowering of, groundwater levels in the Edna Valley sub-basin. Given the information we present, we hope that you agree that there is a need to protect groundwater levels in the Edna Valley sub-basin. And, we hope that you will reconsider the draft RSR finding that no resource deficiency exists and that no water supply severity level assignment is warranted.

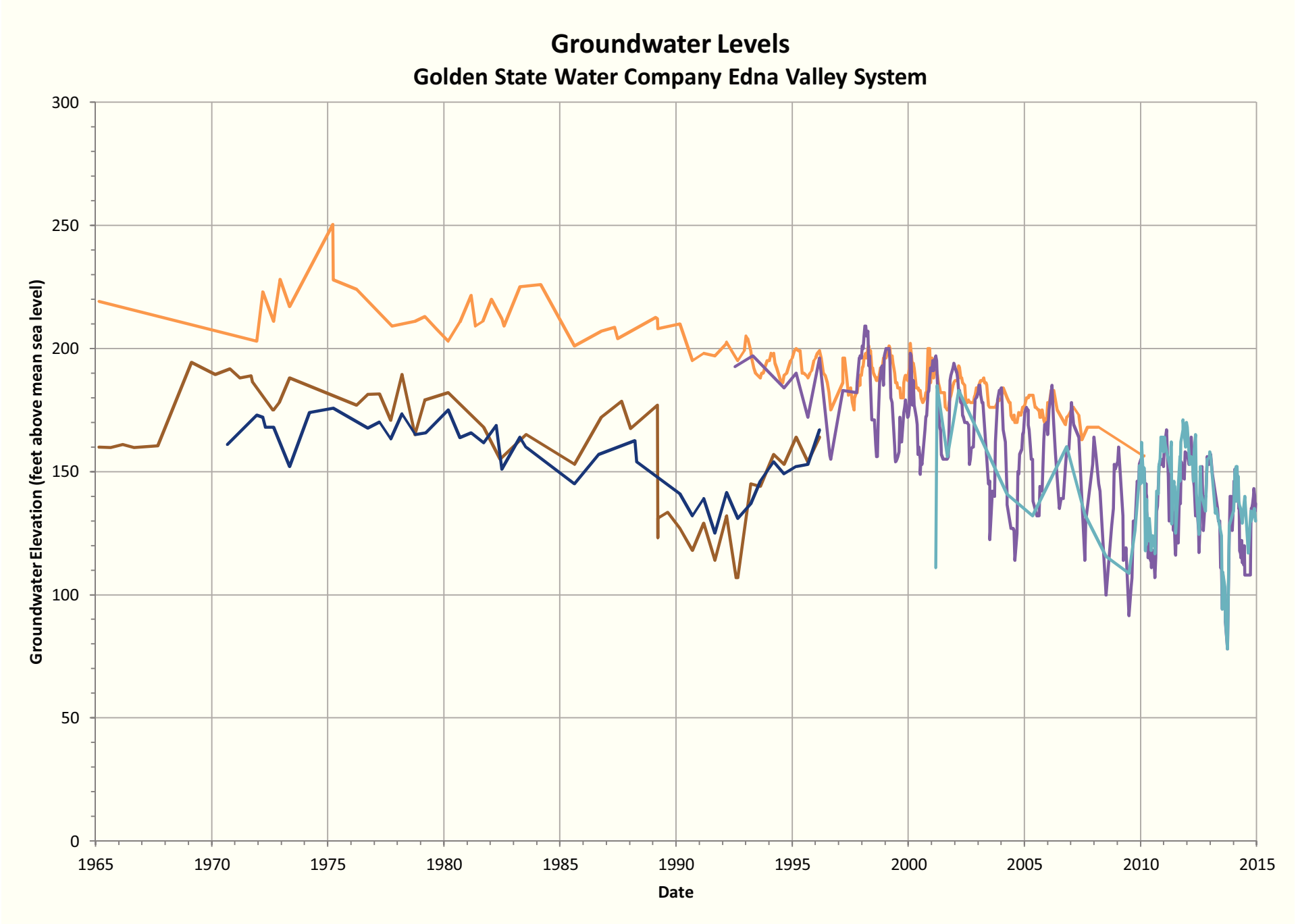
Sincerely,

Golden State Water Company

Toby B. Moore, PhD
Water Resources Manager and Chief Hydrogeologist

Cc: Mark Hutchinson, San Luis Obispo County
Rob Hanford, GSWC
Anthony Lindstrom, GSWC
Bob McVicker, GSWC
Patrick Vowell, GSWC

Attachment: Groundwater Levels chart



Golden State Water Company

Table I-4 -- Recommended Levels of Severity – Water Supply		
Groundwater Basins and Affected Water Purveyors	**Recommended LOS**	**Recommended Actions**
		buildin per its for new develop ent.
Cayucos Valley Groundwater Basin Old Valley Groundwater Basin *Water Purveyors* CSA 10A Morro Rock Mutual Water Co. Paso Robles Water Assoc.	None None	Continue to support efforts to i prove water conservation, the efficient use of water, and water re-use. Continue to collect develop ent i pact fees for the construction of water supply infrastructure. Support efforts to develop sustainable supple ental sources of water.
Los Osos Valley Groundwater Basin *Water Purveyors* Los Osos CSD S T Mutual Water Co. Golden State Water Co.	**III**	LOS III to re ain in place. Continue to support efforts to co plete and i ple ent a Basin Mana e ent Plan. Support efforts to co plete the wastewater project.
San Luis Obispo Valley Groundwater Basin – San Luis Sub-basin San Luis Obispo Valley Groundwater Basin – Avila Valley Sub-basin *Water Purveyors* Avila Beach CSD Avila Valley Mutual Water Co. San Mi uelito Mutual Water Co. CSA 12	None None	Support efforts to deter ine the safe yield of the Avila Valley Sub-basin
Santa Maria Valley Groundwater Basin – Northern Cities Mana e ent Area Santa Maria Valley Groundwater Basin – Nipo o Mesa Mana e ent Area *Water Purveyors* Nipo o CSD Woodlands Mutual Water Co. Oceano CSD Golden State Water Co pany Rural Water Co pany	None **III**	Consider endin the Title 8 retrofit-upon-sale ordinance in the NMWCA. The pro ra has run for four years and approxi ately 5 of ho es have needed retrofittin . Follow the pro ress of the Supple ental Water Alternatives Evaluation Co ittee. Coordinate any needed County actions such as an AB 1600 study to quantify the

Table I-4 -- Recommended Levels of Severity – Water Supply		
Groundwater Basins and Affected Water Purveyors	**Recommended LOS**	**Recommended Actions**
		costs and benefits of the identified supple ental water project for roundwater users outside the Nipo o CSD. Collaborate with the ~~Nipo o CSD~~NMMA and NCMA A encies and other stakeholders (e. . SSLOCSD, Pis o Beach, etc.) to assist in their efforts to address area wide water issues includin recycled water, and roundwater studies and onitorin consistent with Board of Supervisors direction fro Au ust 19, 2014.
Santa Mar arita Groundwater Basin *Water Purveyors* CSA 2	**III**	Support efforts to deter ine the safe yield of the Santa Mar arita Groundwater Basin. Support efforts to develop additional sustainable water supplies for CSA 2 .
Paso Robles Groundwater Basin *Water Purveyors* San Mi uel CSD CSA 16 – Shandon	**III**	LOS III for the Basin as a whole and for the Atascadero Sub-basin. Continue to support efforts to co plete and i ple ent a Basin Mana e ent Plan.
Paso Robles Groundwater Basin – Atascadero Sub-basin *Water Purveyors* Te pleton CSD	**III**	LOS III for the Basin as a whole and for the Atascadero Sub-basin. Continue to support efforts to co plete and i ple ent a Basin Mana e ent Plan.
Lake Naci iento Area *Water Purveyors* Herita e Ranch CSD Naci iento Water Co.	None	Continue to support efforts to i prove water conservation, the efficient use of water, and water re-use. Continue to collect develop ent i pact fees for the construction of water supply infrastructure. Support efforts to develop sustainable supple ental sources of water.

Table II-2 – Groundwater Basins			
Location	**Groundwater Basins/ Sub-basins**	**Safe Basin Yield (AFY)**	**Notes**
San Luis Obispo/ Edna Valley	San Luis Obispo Valley – San Luis Valley Sub- basin	2,000	A 1991 study reported a sustained yield of the entire San Luis Valley Groundwater Basin under existin conditions at 5,900 AFY. Sub-basin roundwater users include the City of San Luis Obispo; California State Polytechnic University; San Luis Coastal Unified School District; Chevron; close to two dozen s all public water syste s servin various co ercial, industrial, and residential properties; a ricultural rowers; and private residences.
	San Luis Obispo Valley – Edna Valley Sub-basin	4,000	Users include Golden State Water Co pany, San Luis Country Club (olf course), a few s all public water syste s, a ricultural rowers, and private residences.
Avila Valley	San Luis Obispo Valley – Avila Valley Sub-basin	(1)	Users include Avila Valley Mutual Water Co pany and San Mi uelito Mutual Water Co pany.
South County/ Nipo o	Santa Maria Valley -- Pis o Creek Valley Sub-basin	(1)	Users include residential and a ricultural overlyin users.
	Santa Maria Valley -- Arroyo Grande Valley Sub-basin	(1)	Sub-basin roundwater users include s all public water syste s (residential, co ercial, and County park), and a ricultural and residential overlyin users.
	Santa Maria Valley -- Nipo o Valley Sub- basin	(1)	Sub-basin roundwater users include residential and a ricultural overlyin users. The Nipo o CSD operates wells within the boundaries of the sub-basin, but these wells tap the deeper fractured rock reservoirs. There is no existin esti ate for the perennial yield of this sub-basin.
	Northern Cities Mana e ent Area	5,600 – 6,800	Basin roundwater users in the NCMA include City of Pis o Beach, City of Arroyo Grande, City of Grover Beach, Oceano Co unity Services District (Oceano CSD), s all public water syste s (includin Halcyon Water Syste), Lucia Mar Unified School District, and residential and a ricultural overlyin users.
	Nipo o Mesa Mana e ent Area	4,800 – 6,000	Basin roundwater users in the Nipo o Mesa Mana e ent Area include Golden State Water Co pany, Rural Water Co pany, Woodlands Mutual Water Co pany (WMWC), ConocoPhillips, Nipo o Co unity Services District (Nipo o CSD), Lucia Mar Unified School District, s all public water syste s (servin residential, industrial and nursery/ reenhouse operations), and co ercial, a ricultural and residential overlyin users. DWR (2002) esti ated the dependable yield (DWR 2002. Pa e ES21) at 4,800 AFY to 6,000 AFY, which was prior to the for al establish ent of the NMMA.
	Santa Maria Valley Mana e ent Area	124,000	Users include a ricultural and residential overlyin users and a s all public water syste . Safe Yield in the San Luis Obispo County portion of the Santa Maria Valley was esti ated between 11,100 AFY and 1 ,000 AFY prior to the for al establish ent of the SMVMA (DWR 2002).
Huasna Valley	Huasna Valley	(1)	Basin water users are residential and a ricultural overlyin users.
Cuya a Valley	Cuya a Valley	10,000	Basin roundwater users in the San Luis Obispo County portion of the basin include oil field operators and residential/a ricultural overlyin users. There is no separate yield esti ate for the San Luis Obispo County portion of the basin.
Carrizo Plain	Carrizo Plain	8,000 – 10,000	Users include a ricultural and residential overlyin users.
	Rafael Valley	(1)	Users include a ricultural and residential overlyin users
	Bi Sprin Area	(1)	Users include a ricultural and residential overlyin users

Commented [DH1]: Please chan e the safe yield to be consistent with the 2002 Groundwater Mana e ent A ree ent.

(includin the Avila Beach area). Lopez Lake allocations to these purveyors are shown in Table II-6.

Two issues could chan e the a ount of water available to contractors and the safe yield. The Arroyo Grande Habitat Conservation Plan, which is currently bein developed, will likely require additional downstrea releases. An interi downstrea release schedule ~~has reduced the a ount of water available to unicipalities~~ was prepared to provide uidance on releases fro the reservoir into Arroyo Grande Creek pendin co pletion of the Habitat Conservation Plan. In Dece ber 2014, the Low Reservoir Release Plan was adopted to reduce deliveries while the reservoir stora e is below 20,000 acre feet, and while a Board adopted drou ht e er ency is in effect, which reduces the a ount of water available to unicipalities. Chan es in operation of the da are bein considered for reducin spills and opti izin future deliveries. Additionally, the City of Pis o Beach, on behalf of the Zone a encies, has taken the lead on conductin a study to consider the feasibility of odifyin the da to au ent capacity of the reservoir.

Table II-6 – Lopez Lake Water Allocations to Water Purveyors Serving the Unincorporated County

Water Users	Allocations (AFY)
Oceano CSD	0
County Service Area 12 (Avila Beach area)	241
Total:	544

Source: San Luis Obispo County Master Water Report, 2012, Table 4.9

Oceano/Nipomo Area Water Supply and Water Systems

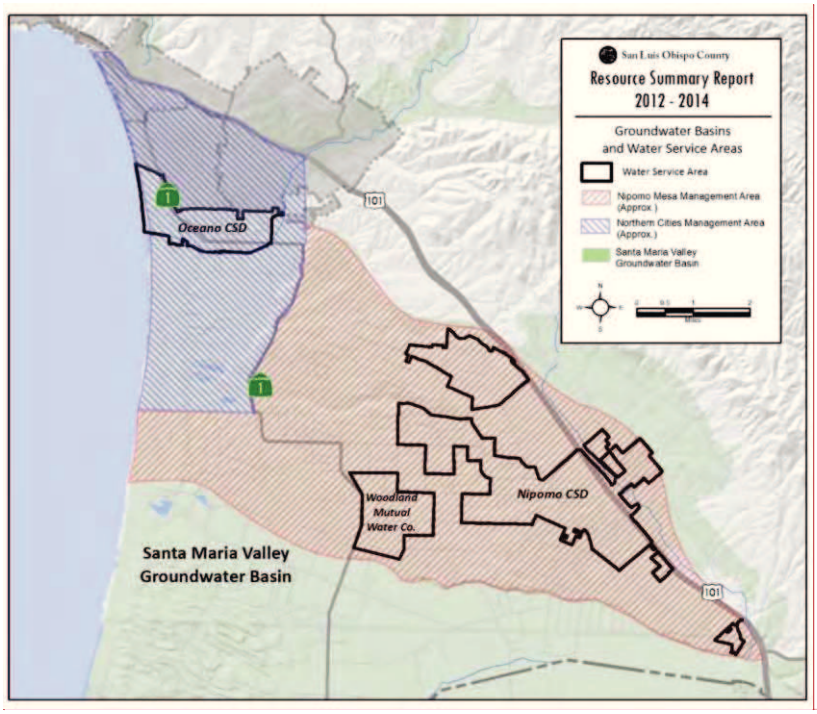


Figure 8 -- Santa Maria Valley Groundwater Basin, Management Areas and Water Purveyors

Commented [DH2]: GIS shapefiles for the actual Mana e ent Area boundaries are available and should be included in the report. Please feel free to contact Dan Hei el (dhei el wsc-inc.co) if you need assistance obtainin these shapefiles.

Santa Maria Valley Groundwater Basin

The Santa Maria Valley roundwater basin underlies the Santa Maria Valley in the coastal portion of northern Santa Barbara and southern San Luis Obispo Counties and serves urban users as well as overlyin well users. The basin also underlies Nipo o and Tri-Cities Mesas, Arroyo Grande Plain, with sub-basins in the Nipo o, Arroyo Grande and Pis o Creek Valleys.

There are two boundaries currently in use for this basin, one defined by the California Depart ent of Water Resources (DWR) and one defined by the Superior Court of California. The court-defined boundary was developed by a technical co ittee for use in basin adjudication. Three sub-basins have also been identified in San Luis Obispo County that are separated fro the ain basin by the Wil ar Avenue fault and are outside the area of adjudication. These are the Pis o Creek Valley (1,220 acres), Arroyo Grande Valley (,860 acres), and Nipo o Valley (6,2 0 acres) Sub-basins.

The Santa Maria Valley Groundwater Basin has been adjudicated. In 2005, the Superior Court of California entered a Jud ent for a basin-wide roundwater liti ation case that defined three

basin ana e ent areas. These ana e ent areas are the Northern Cities Mana e ent Area (NCMA), the Nipo o Mesa Mana e ent Area (NMMA), and the Santa Maria Valley Mana e ent Area (SMVMA).

Northern Cities Management Area

The Northern Cities Mana e ent Area (NCMA) is part of the Santa Maria Valley Groundwater Basin adjudicated area. The Oceano CSD is the only water purveyor servin the unincorporated County. The 2002 Groundwater Mana e ent A ree ent (the "gentlemen's a ree ent") a on the Northern Cities which includes the cities of Arroyo Grande, Pis o Beach and Grover Beach, alon with the Oceano CSD, allocates an assu ed safe yield of 9,500 AFY. The safe yield included subdivisions for a ricultural irri ation (5, 00 AFY), subsurface flow to the ocean (200 AFY) and urban uses (4,000 AFY). It also provided that urban roundwater allocations can be increased when land within the incorporated boundaries is converted fro a ricultural uses to urban uses, referred to as an a ricultural conversion credit, or "ag credit." The 2010 Annual Report for the Northern Cities Mana e ent Area (NCMA) su arizes the roundwater allocations for the Northern Cities as follows:

Table II-12 -- Allocation of Water Among Parties to The 2002 Northern Cities Management Agreement

Urban Area	Allotment (AFY)	Ag Credit (AFY)	Total (AFY)
Arroyo Grande	1,202	112	1, 14
Grover Beach	1,198	209	1,407
Pis o Beach	700	0	700
Oceano CSD	900	0	900
Total:	4,000	21	4, 21

Source: San Luis Obispo County Master Water Report, 2012, pa e 4-30

The Arroyo Grande Plain Hydrolo ic Sub-area (part of the Santa Maria Valley Groundwater Basin) provides fro 0 to 100 percent of the water supply for the urban users. The only water purveyor servin the unincorporated areas of the Northern Cities Mana e ent Area is the Oceano CSD. However, the roundwater extraction ri hts are shared by a ree ent with Pis o Beach, the City of Arroyo Grande, the City of Grover Beach, and the Oceano CSD. As party to the Santa Maria Valley Groundwater Basin liti ation, extraction ri hts ay be increased or decreased at a future date. Groundwater availability in the NCMA is pri arily constrained by water quality issues and water ri hts. The ajor purveyors have a reed to share the water resources throu h a cooperative a ree ent that also sets aside water for a ricultural use and for basin outflow, althou h the a ount allocated for basin outflow has been dee ed unreasonably low (Todd, 2007). Followin the detection of evidence of seawater intrusion in 2009, the NCMA water purveyors worked cooperatively with each other and the County to reduce roundwater pu pin .

Water availability in the NCMA is pri arily constrained by water quality issues and water ri hts. Basin sedi ents in the ana e ent area extend offshore alon several iles of coastline, where sea water intrusion is the reatest potential threat to the supply. Low coastal roundwater levels indicated a potential for seawater intrusion that was locally anifested in sentry wells 2S/1 E N02 and N0 in 2009 after dry years, with levels and water quality

Commented [DH3]: Please us the updated water allocation table fro the 201 NCMA Annual Report, which includes updated a credit allocations.

Commented [DH4]: Please clarify what this eans. Each of the NCMA a encies have surface water supplies (i.e. Lopez Entitle ents, SWP Allocation).

i provin after an avera e rainfall year in 2010. The ajor purveyors have a reed to share the water resources throu h a cooperative a ree ent that also sets aside water for a ricultural use and for basin outflow. Followin the detection of evidence of seawater intrusion in 2009, the NCMA water purveyors worked cooperatively with each other and the District to reduce roundwater pu pin . This approach included the followin ana e ent strate ies:

- Increased surface water use throu h delivery of surplus supplies fro Lopez reservoir
- Expanded conservation pro ra s and custo er education
- Ne otiations to secure an e er ency allocation of additional State Water Project supplies, if needed
- Hydraulic evaluation and aintenance of the Lopez pipeline
- Increased roundwater onitorin
- Expanded re ional cooperation

Goin forward, the NCMA water purveyors plan to i ple ent several initiatives to i prove the long-term sustainability of their water supplies. These initiatives could include:

- Develop ent of a roundwater odel for the Santa Maria Valley Groundwater Basin
- ~~Pursuit of additional per anent and e er ency allocations of State Water Project supplies~~
- Enhanced conjunctive use of the roundwater basin
- Re ional recycled water projects

Oceano CSD aintains adequate supply to eet existin and forecast build-out de ands. With sufficient conservation, Oceano CSD should have adequate supply to not only eet its customer's needs, but also aintain a ~~reliability~~ reliable supply. Oceano CSD's participation in the County's drou ht buffer pro ra for State Water would i prove water supply reliability in the event of drastic cut backs in State Water Project supplies.

Water de and projected over 20 years will not equal or exceed the esti ated dependable supply for the Northern Cities Mana e ent Area. No reco ended Level of Severity.

Commented [DH5]: This sentence is redundant- see previous pa e.

Commented [DH6]: Not sure which a encies are currently pursuin SWP water.

constraints on water availability in the NMMA are physical li itations to the east, water quality on the west, and water ri hts.

Even with additional conservation easures in place, Golden State Water Co pany, Rural Water Co pany, Woodlands MWC, and Nipo o CSD could experience supply deficits if roundwater is insufficient to eet increases in de ands. To address this need, recycled water, investi atin other roundwater supply sources, and increasin delivery fro the Nipo o Supple ental Water Project (discussed below) are considered the ost feasible water ana e ent strate y options to consider i ple entin .

Nipo o Supple ental Water Project. The Nipo o CSD has investi ated ultiple sources of supple ental water and, as a result, si ned an a ree ent with the City of Santa Maria to pursue an intertie project. The January 5, 2010 Wholesale Water Supply A ree ent established the basis for purchase and delivery of water fro the City to the Nipo o CSD. The project is currently under construction. When co pleted, it will be capable of deliverin up to ,000 AFY and could be co pleted in two and a half years. Once the supple ental water syste is in place, Nipo o CSD will be required to purchase 2,167 AFY of that supply. Three other water purveyors, Woodlands MWC, Golden State Water Co pany, and Rural Water Co pany will share in the project costs and will to ether receive one-third of the andated ini u water delivery (8 of 2,500 AFY). The additional 500 AFY capacity has been reserved for use by the Nipo o CSD for infill but no annexations or General Plan A end ents ay use this water. Additional water via the City of Santa Maria (if possible), desalination and recycled water are also bein considered as a long-term alternative source for the Nipo o CSD and others in the re ion.

Althou h the Santa Maria Groundwater Basin has been adjudicated, the potential for shortfalls to purveyors and overlyin users that continue to rely pri arily on roundwater re ains. The NMMA, the County, and local land owners actively and cooperatively ana e surface and roundwater with the oal of preservin the lon -ter inte rity of water supplies in the NMMA. However, uncertainties re ain about the reliability of water resources servin the Nipo o Mesa Mana e ent Area. Consequently, collaboration between NMMA and NCMA a encies and other stakeholders (e. . SSLOCSD, Pis o Beach, etc.) should be pursued in considerin recycled water as an option to i prove water resource reliability.

Water de and projected over 15 years is projected to equal or exceed the esti ated dependable supply. **Recommended Level of Severity III**

Commented [DH7]: Please provide an updated description of the status of the Nipo o Supple ental Water Project.

Commented [DH8]: Add specific info fro 201 NCMA NMMA Annual reports re ardin the rowin pu pin depression in the NMMA and de and that exceeds the ability of the supply to replace water pu ped fro the aquifers.

Table II-13 -- Santa Maria Valley Groundwater Basin – Nipomo Mesa Management Area Existing and Forecasted Water Supply and Demand

Demand	Nipomo CSD	Woodlands Mutual Water Co.	Agriculture	Rural
Current De and (AFY)[1]	2,517.0	849.	,800	1,700
Forecast De and in 15 Years (AFY)	2,790.5	895.6	4,050	1,700
Forecast De and in 20 Years (AFY)	2,906.	9 2.8	4,1 .	1,700
Buildout De and (0 Or More Years) (AFY)	2,984[2]	1,440-1,600[2]	,800-4, 00	1,700
Supply				
~~State Water Project (AFY)~~[3]	~~0~~	~~0~~	~~0~~	~~0~~
~~Lopez Lake Reservoir (AFY)~~	~~0~~	~~0~~	~~0~~	~~0~~
~~Santa Maria Valley Groundwater Basin -- Arroyo Grande Plain Sub-Area (AFY)~~[4]	~~0~~	~~0~~	~~0~~	~~0~~
~~Transfers~~[5]	~~0~~	~~0~~	~~0~~	~~0~~
Nipo o Supple ental Water Project (AFY)[6]	2,157	417	0	0
Santa Maria Valley Groundwater Basin -- Nipo o Mesa Sub-Area (AFY)	457	65	4, 00	1,700
Recycled Water (AFY)	60-74	24-28	0	0
Total Supply:	2,698	810	Uncertain	Uncertain
Water Supply Versus Forecast Demand	Water de and projected over 15 years is projected to equal or exceed the esti ated dependable supply.[7]			

Sources: Water Syste Usa e for s: July 2012 – June 201 ; July 201 – June 2014, San Luis Obispo County Master Water Report, 2012, Table 4.60

Notes:

1. See Table II-1. Current year data for a riculture and rural are fro 2012.
2. Ten percent additional water conservation (beyond what has already been acco plished) assu ed for the low end of the forecast build-out de and, except for Grover Beach, which assu ed 20 additional reduction.
3. ~~State Water Project avera e allocation assu ed 66 percent of contract water service a ount.~~
4. ~~Safe yield of 9,500 AFY with subdivisions for applied irri ation (5, 00 AFY), subsurface outflow to the ocean (200 AFY), and urban use (4,000 AFY). The 2002 Groundwater Mana e ent A ree ent safe yield allot ent for urban use is broken down per the nu ber shown.~~
5. ~~Arroyo Grande has an active a ree ent to purchase 100 AFY of Oceano CSD supplies fro roundwater or Lopez Lake water. This te porary a ree ent ends in 2014.~~
6. Nipo o supple ental water project includes Nipo o CSD, Woodlands MWC, Golden State Water Co pany, and Rural Water Co pany. Nipo o CSD will receive approxi ately 1,667 AFY and has reserved an additional 500 AFY. The other three will receive 8 AFY.
7. The NCMA cities, NMMA cities, County, District, and local land owners actively and cooperatively ana e surface and roundwater with the oal of preservin the long-term inte rity of water supplies in the NCMA and NMMA.

San Simeon Valley and Santa Rosa Valley Groundwater Basins (Cambria)

1. LOS III to re ain in place.

2. Collaborate with the Ca bria Co unity Services District to address issuance of a li ited nu ber of intent-to-serve letters and buildin per its based on the a ressive water conservation pro ra developed by Maddaus Water Mana e ent, Inc.

. Collaborate with the Ca bria Co unity Services District to revise the County Growth Mana e ent Ordinance to reflect the issuance of a s all nu ber of buildin per its for new develop ent as part of a te porary pilot pro ra .

4. Collaborate with the Ca bria Co unity Services District to prepare a CEQA deter ination, with the County actin as a Responsible A ency, that identifies the potentially si nificant i pacts of a te porary, s all scale pilot pro ra to issue intent-to-serve letters and buildin per its for new develop ent.

Cayucos Valley and Old Valley Groundwater Basins (Cayucos)

1. Support efforts to secure an alternative supply as a reliability reserve, perhaps throu h the acquisition of an additional allocation fro the Naci iento Water Project.

Los Osos Groundwater Basin

1. LOS III to re ain in place.

2. Continue to support efforts to co plete and i ple ent a Basin Mana e ent Plan.

. Support efforts to co plete the wastewater project.

San Luis Obispo Valley Groundwater Basin

1. Support efforts to deter ine the safe yield of the Avila Valley Sub-basin.

Santa Maria Valley groundwater Basin (Nipomo Mesa Area)

1. Consider endin the Title 8 retrofit-upon-sale ordinance in the NMWCA. The pro ra has run for four years and approxi ately 5 of ho es have needed retrofittin .

2. Follow the pro ress of the *Supplemental Water Alternatives Evaluation Committee*. Coordinate any needed County actions such as an AB 1600 study to quantify the costs and benefits of the identified supple ental water project for roundwater users outside the Nipo o CSD.

. Collaborate with the Nipo o CSD and other stakeholders to assist in their efforts to address area wide water issues.

4. Continue to help fund area wide water conservation throu h the fee on new construction.

Paso Robles Groundwater Basin

1. LOS III for the Basin as a whole and for the Atascadero Sub-basin.

Commented [DH9]: Reco ended actions for Nipo o Mesa Area should additionally include:

Providin financial support for the develop ent of a roundwater odel for the NCMA/NMMA portions of the Santa Maria Groundwater Basin, as reco ended by the SLO County BOS in Resolution NO. 2014-220.

Supportin supple ental water supply projects in the NCMA/NMMA portions of the Santa Maria Groundwater Basin to i prove water supply reliability, includin recycled water.

NIPOMO COMMUNITY SERVICES DISTRICT

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MICHAEL W. SEITZ, **GENERAL COUNSEL**

Celebrating 50 Years of Service to the Community, 1965 - 2015

148 SOUTH WILSON STREET POST OFFICE BOX 326 NIPOMO, CA 93444 - 0326
(805) 929-1133 FAX (805) 929-1932 Website address: ncsd.ca.gov

February 11, 2015

Mr. Brian Pedrotti, AICP
San Luis Obispo County Planning & Building Department
bpedrotti@co.slo.ca.us

Dear Mr. Pedrotti:

SUBJECT: DRAFT RESOURCES SUMMARY REPORT COMMENTS

We appreciate the opportunity to review the County's draft 2012/2014 Resources Management System (RMS) biennial report. The recommendations and comments below were developed by the District's Facilities/Water Resources Committee and approved by the Board of Directors on February 11, 2015.

General Comments:

1. The District recognizes the County's continued effort to improve the RMS and biennial Resource Summary Report (RSR).
2. The County RSR should rely on annual reports by the court appointed Nipomo Mesa Management Area (NMMA) and Northern Cities Management Area (NCMA) to provide more complete groundwater production numbers and projections. Large NMMA purveyors accounting for significant current and projected demand are not included in the draft RSR.
3. In 2006, the County certified a Level of Severity III for the NMMA based on a Resources Capacity Study conducted in 2004. The County adopted Ordinance 3090 to carry out the study's recommended actions. The draft RSR makes neither mention of this action nor the status of County efforts to implement the Ordinance. This work needs to be summarized and updated.

Specific Comments:

1. Recommend Levels of Severity – Water Supply:

   The NMMA and NCMA are contiguous geographic areas overlying the Santa Maria Groundwater Basin. The draft RSR recommends maintaining a Level Severity III for water resources in the NMMA and "None" for water resources in the NCMA. These contrary recommendations are not supported by findings made in the draft RSR or by the NCMA in their annual reports to the court.

The draft RSR summarizes the NCMA's detection of evidence of seawater intrusion into NCMA groundwater in 2009 and then subsequently finds the entire NCMA water resources are dependable for 20 years based on Oceano's robust water portfolio and the commitment of other NCMA agencies to 'study and conserve'.

The NCMA Annual groundwater report is very clear that water resources in the management area are stressed and new supply is needed. The County's decision to constrain the RSR to unincorporated areas does not change the physical condition of the basin. A recommendation for LOS III for the NCMA is appropriate.

2. Golden State Water Company, Rural Water Company, and Mesa Dunes Mobile Home Park are large purveyors within the NMMA that are not accounted for in the draft RSR. See NMMA annual report for data.
3. NCSD formed a Supplemental Water Alternatives Evaluation Committee back in 2012. The seven member citizens Committee completed its work in February 2013 and were disbanded at that time. It is recommended that references to this Committee be updated or omitted. The Committee's work product provides a comprehensive review of South County supplemental water opportunities and is available at our website.

As a regional public agency, the County has the capacity to play a key role in addressing regional resource limitations through planning and resource development. We hope the County will "lead" and/or "facilitate" versus "collaborate" with the District and other area purveyors to address South County's area wide water resources issue.

Sincerely,

NIPOMO COMMUNITY SERVICES DISTRICT

Michael S. LeBrun

Michael S. LeBrun
General Manager

ec: 4th District Supervisor Lynn Compton

- Schools
- Parks
- Air Quality

The LOS for each resource are summarized below.

WATER SUPPLY

Level of Severity	Water Supply Criteria
I	Water demand projected over 20 years equals or exceeds the estimated dependable supply. LOS I provides five years for preparation of resource capacity studies and evaluation of alternative courses of action.
II	Water demand projected over 15-20 years (or other lead time determined by a resource capacity study) equals or exceeds the estimated dependable supply.
III	Water demand projected over 15 years (or other lead time determined by a resource capacity study) equals or exceeds the estimated dependable supply OR The time required to correct the problem is longer than the time available before the dependable supply is reached.

WATER SYSTEMS

Level of Severity	Water System Criteria
I	The water system is projected to be operating at the design capacity within seven years. Two years would then be available for preparation of a resource capacity study and evaluation of alternative courses of action.
II	A five-year or less lead time (or other lead time determined by a resource capacity study) needed to design, fund and construct system improvements necessary to avoid a LOS III problem.
III	Water demand equals available capacity: a water distribution system is functioning at design capacity or will be functioning at capacity before improvements can be made. The capacity of a water system is the design capacity of its component parts: storage, pipelines, pumping stations and treatment plants.

WASTEWATER TREATMENT

Level of Severity	Wastewater Treatment Criteria
I	The service provider or RWQCB determines that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within 4 years. This mirrors the time frame used by the RWQCB to track necessary plant upgrades.
II	RWQCB determines that the monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within 2 years.
III	Peak daily flow equals or exceeds the capacity of a wastewater system for treatment and/or disposal facilities.

WASTEWATER COLLECTION SYSTEMS

Level of Severity	Wastewater Collection Criteria
I	2-year projected flows equal 75% of the system capacity. A 2-year period is Recommended for the preparation of resource capacity study.
II	System is operating at 75% capacity OR The five-year projected peak flow (or other flow/time period) equals system capacity OR The inventory of developable land in a community would, if developed, generate enough wastewater to exceed system capacity.
III	Peak flows fill any component of a collection system to 100% capacity.

1. A wastewater collection system includes facilities that collect and deliver wastewater to a treatment plant for treatment and disposal (sewer pipelines, lift stations, etc.)

SEPTIC SYSTEMS

Level of Severity	Septic Systems Criteria
I	Failures occur in 5% of systems in an area or other number sufficient for the County Health Department to identify a potential public health problem.
II	Failures reach 15% and monitoring indicates that conditions will reach or exceed acceptable levels for public health within the time frame needed to design, fund and build a project that will correct the problem, based upon projected growth rates.
III	Failures reach 25% of the area's septic systems and the County Health Department and RWQCB find that public health is endangered.

1. Includes septic tank systems or small aerobic systems with subsurface disposal. Typical disposal systems include leach fields, seepage pits, or evapotranspiration mounds.

<table>
<tr><th colspan="4">Table I-3 -- Summary of Changes To Criteria for Levels of Severity</th></tr>
<tr><th>Resource</th><th colspan="3">Summary of Changes</th></tr>
<tr><td>Water Supply</td><td colspan="3">The timeframes for the projected remaining dependable water supply have been extended for each LOS as follows:
<table><tr><th>Level of Severity</th><th>Previous LOS</th><th>Revised LOS</th></tr><tr><td>LOS I</td><td>9 years</td><td>20 years</td></tr><tr><td>LOS II</td><td>7 Years</td><td>15 to 20 Years</td></tr><tr><td>LOS III</td><td>When supply equal or exceeds estimated dependable supply</td><td>Supply will equal or exceed estimated dependable supply within 15 years, OR the timeframe to correct the problem is longer than the timeframe for the remaining supply.</td></tr></table></td></tr>
<tr><td>Water Systems</td><td colspan="3">The LOS timeframes are unchanged. However, the criteria have been refined to clarify the relationship between the time required to design and implement system improvements to avoid a worsening LOS.</td></tr>
<tr><td>Wastewater Treatment</td><td colspan="3">Criteria have been revised to refer to “monthly average daily flow” rather than “peak flow.” The timeframe for reaching the LOS I threshold has been reduced from 6 years to 4 years, and for LOS II from 5 years to 2 years. Criteria for LOS III remain unchanged.</td></tr>
<tr><td>Wastewater Collection</td><td colspan="3">The criteria for LOS I remain unchanged. The criteria for LOS II have been expanded to include two additional criteria: 1) the projected 5-year flow equals system capacity, or 2) buildout of remaining developable land would exceed system capacity. LOS III is unchanged.</td></tr>
<tr><td>Septic Systems</td><td colspan="3">Prior RSRs did not have a separate LOS for septic systems.</td></tr>
<tr><td>Roads</td><td colspan="3">LOS are unchanged.</td></tr>
<tr><td>Highway Interchanges</td><td colspan="3">Prior RSRs did not have a separate LOS for highway interchanges.</td></tr>
<tr><td>Schools</td><td colspan="3">No changes.</td></tr>
<tr><td>Parks</td><td colspan="3">Levels of severity for parks were considered for the first time in the 2010-2012 RSR. However, the RSR did not establish specific LOS criteria but instead relied on the standards of the General Plan Parks and Recreation Element. The LOS for parks used in this RSR were prepared by the County Parks Department.</td></tr>
<tr><td>Air Quality</td><td colspan="3">The LOS criteria were established by the San Luis Obispo Air Pollution Control District and have been revised based on the incidence of violations of state air quality standards only. Thresholds, and timeframes for reaching the thresholds, have been eliminated.</td></tr>
</table>

Table I-4 -- Recommended Levels of Severity – Water Supply		
Groundwater Basins and Affected Water Purveyors	**Recommended LOS**	**Recommended Actions**
		building permits for new development.
Cayucos Valley Groundwater Basin Old Valley Groundwater Basin *Water Purveyors* CSA 10A Morro Rock Mutual Water Co. Paso Robles Water Assoc.	None None	Continue to support efforts to improve water conservation, the efficient use of water, and water re-use. Continue to collect development impact fees for the construction of water supply infrastructure. Support efforts to develop sustainable supplemental sources of water.
Los Osos Valley Groundwater Basin *Water Purveyors* Los Osos CSD S&T Mutual Water Co. Golden State Water Co.	**III**	LOS III to remain in place. Continue to support efforts to complete and implement a Basin Management Plan. Support efforts to complete the wastewater project.
San Luis Obispo Valley Groundwater Basin – San Luis Sub-basin San Luis Obispo Valley Groundwater Basin – Avila Valley Sub-basin *Water Purveyors* Avila Beach CSD Avila Valley Mutual Water Co. San Miguelito Mutual Water Co. CSA 12	None None	Support efforts to determine the safe yield of the Avila Valley Sub-basin
Santa Maria Valley Groundwater Basin – Northern Cities Management Area Santa Maria Valley Groundwater Basin – Nipomo Mesa Management Area *Water Purveyors* Nipomo CSD Woodlands Mutual Water Co. Oceano CSD	None **III**	Consider ending the Title 8 retrofit-upon-sale ordinance in the NMWCA. The program has run for four years and approximately 5% of homes have needed retrofitting. Follow the progress of the Supplemental Water Alternatives Evaluation Committee. Coordinate any needed County actions such as an AB 1600 study to quantify the

Comment [PAO2]: 5% of all homes or 5% of those that have sold? Could retrofit on sale be implemented in Oceano?

Comment [PAO1]: Other purveyors also exist (Golden State Water; Rural Water Co.)

Table I-4 -- Recommended Levels of Severity – Water Supply		
Groundwater Basins and Affected Water Purveyors	**Recommended LOS**	**Recommended Actions**
		costs and benefits of the identified supplemental water project for groundwater users outside the Nipomo CSD. Collaborate with the Nipomo CSD, Oceano CSD, South County Sanitation District and other stakeholders to assist in their efforts to address area wide water issues including recycled water, and groundwater studies and monitoring consistent with Board of Supervisors direction from August 19, 2014.
Santa Margarita Groundwater Basin *Water Purveyors* CSA 23	**III**	Support efforts to determine the safe yield of the Santa Margarita Groundwater Basin. Support efforts to develop additional sustainable water supplies for CSA 23.
Paso Robles Groundwater Basin *Water Purveyors* San Miguel CSD CSA 16 – Shandon	**III**	LOS III for the Basin as a whole and for the Atascadero Sub-basin. Continue to support efforts to complete and implement a Basin Management Plan.
Paso Robles Groundwater Basin – Atascadero Sub-basin *Water Purveyors* Templeton CSD	**III**	LOS III for the Basin as a whole and for the Atascadero Sub-basin. Continue to support efforts to complete and implement a Basin Management Plan.
Lake Nacimiento Area *Water Purveyors* Heritage Ranch CSD Nacimiento Water Co.	None	Continue to support efforts to improve water conservation, the efficient use of water, and water re-use. Continue to collect development impact fees for the construction of water supply infrastructure. Support efforts to develop sustainable supplemental sources of water.

Table II-2 – State Water Project Water Service Amounts (AFY) To Water Purveyors Serving The Unincorporated County						
Contractor	**Water Service Amount**	**Drought Buffer**	**Total**	**6 % Allocation Year**	**66-69% Allocation Year**	**100% Allocation Year**
Oceano CSD	750	0	750	45	495	750
San Miguelito Mutual Water Co.	275	275	550	33	275	275
Avila Beach CSD	100	0	100	6	66	100
Avila Valley Mutual Water Co.	20	60	80	5	20	20
Shandon	100	0	100	6	66	100
Total:	1,245	335	1,580	95	922	1,245

Source: San Luis Obispo County Master Water Report, 2012, Table 4.5

Notes:

1. Minimum, average, and maximum allocations established in the State Water Project Delivery Reliability Report 2007 (August 2008), page 51, Table 6.13. This study used 66 percent for the average allocation year.

Many factors will affect future SWP deliveries to the County and SWP subcontractors within the County, including pumping restrictions for the Sacramento Delta and climate change. Estimating the delivery reliability of the SWP depends on many issues, including possible future regulatory standards in the Delta, population growth, water conservation, increased use of recycled water, drought buffer purchases, and water transfers. The DWR State Water Project Delivery Reliability Report 2007 (August 2008) estimates future (2027) SWP delivery reliability and incorporates the 2007 federal court ruling for Delta pumping and potential impacts of future climate change. When compared to previous reliability reports, total annual deliveries for 2027 show decreases in deliveries in most years if no actions are taken to address the factors causing the decrease in availability. It is important to recognize that actions to re-establish reliability are being evaluated by DWR State Water Contractors and other State and Federal agencies. Future actions may include new environmental efforts as well as infrastructure improvements envisioned when the SWP was originally scoped in the 1960s.

Nacimiento Water Project

The Monterey County Flood Control and Water Conservation District (now known as the Monterey County Water Resources Agency (MCWRA) constructed the Nacimiento Dam in 1957. The dam and reservoir continue to be operated by MCWRA. The lake has a capacity of 377,900 acre-feet (AF) and a surface area of 5,727 acres. Water is collected from a 365 square mile watershed that is comprised of grazing lands and rugged wilderness.

In 1959, the County secured the rights to 17,500 AFY from Lake Nacimiento, with 1,750 AFY reserved for lakeside users and the Heritage Ranch Community Services District (Heritage Ranch CSD). After a long series of studies and negotiations, the Nacimiento Water Project (NWP) was initiated. The project delivers raw lake water from Lake Nacimiento to communities within San Luis Obispo County. Water purveyors serving the unincorporated county who are participating

Several agreements establish policy for the operation of the Whale Rock system and actions of the member agencies. The downstream water rights agreement (the original 1958 agreement was amended in April 1996) define water entitlements for adjacent and downstream water users, including water purveyors serving the unincorporated County. The Cayucos Area Water Organization, one of the parties to this agreement, consists of three public water purveyors and the cemetery, all in the Cayucos area. In addition to the agencies, water entitlements were identified for two separate downstream land owners. An exchange agreement between CSA 10A and the City of San Luis Obispo (2005) allows the delivery of up to 90 AFY of the City's Whale Rock water allocation to CSA 10A in exchange for CSA 10A's purchase of an equivalent amount of Nacimiento Water for delivery to the City. The anticipated need for CSA 10A is 25 AFY at buildout.

Total Whale Rock Reservoir entitlements are summarized on Table II-5.

Table II-5 – Whale Rock Downstream Entitlements

Water Users	Downstream Water Entitlements (AFY)
Cayucos Area Water Organization[1]	
Paso Robles Beach Water Association	222
Morro Rock Mutual Water Co.	170
County Service Area 10A	190[3]
Cayucos-Morro Bay Cemetery District	18
Mainini Ranch[2]	50
Ogle[2]	14
Total:	664

Source: San Luis Obispo County Master Water Report, 2012, Table 4.8

Notes:
1. The referenced agreement establishes the amount of 600 AFY to CAWO. The allocations to the CAWO members are part of an internal agreement amongst the members.
2. The agencies generally receive their entitlements via pipeline from the reservoir, while the land owners' entitlement is released from the reservoir.
3. CSA 10A has procured 25 - 90 AFY of Nacimiento Water Project via exchange with City of San Luis Obispo for Whale Rock Reservoir water. Agreement provisions allow for up to 90 AFY of NWP if necessary. Nacimiento water could be delivered to Morro Rock MWC or Paso Robles Beach Water Association, as part of this arrangement.

Lopez Lake/Reservoir

The County completed the Lopez Dam in 1968 to provide a reliable water supply for agricultural and municipal needs as well as flood protection for coastal communities. Lopez Reservoir has a capacity of 49,388 AF. The lake covers 950 acres and has 22 miles of oak covered shoreline.

Allocations for Lopez Lake water are based on a percentage of the safe yield of the reservoir, which is 8,730 AFY. Of that amount, 4,530 AFY are for pipeline deliveries and 4,200 AFY are reserved for downstream releases. The dam, terminal reservoir, treatment and conveyance facilities are a part of Flood Control Zone 3 (Zone 3). Water agencies serving the unincorporated County that contract for Lopez water in Zone 3 include the community of Oceano and CSA 12

(including the Avila Beach area). Lopez Lake allocations to these purveyors are shown in Table II-6.

Two issues could change the amount of water available to contractors and the safe yield. The Arroyo Grande Habitat Conservation Plan, which is currently being developed, will likely require additional downstream releases. An interim downstream release schedule ~~has reduced the amount of water available to municipalities~~ was prepared to provide guidance on releases from the reservoir into Arroyo Grande Creek pending completion of a Habitat Conservation Plan. In December 2014, the Low Reservoir Response Plan was adopted to reduce deliveries while the reservoir storage is below 20,000 acre feet, and while a Board adopted drought emergency is in effect, which reduces the amount of water available to municipalities. Changes in operation of the dam are being considered for reducing spills and optimizing future deliveries. Additionally, the City of Pismo Beach, on behalf of the Zone 3 agencies, has taken the lead on conducting a study to consider the feasibility of modifying the dam to augment capacity of the reservoir.

Table II-6 – Lopez Lake Water Allocations to Water Purveyors Serving the Unincorporated County

Water Users	Allocations (AFY)
Oceano CSD	303
County Service Area 12 (Avila Beach area)	241
Total:	544

Source: San Luis Obispo County Master Water Report, 2012, Table 4.9

Oceano/Nipomo Area Water Supply and Water Systems

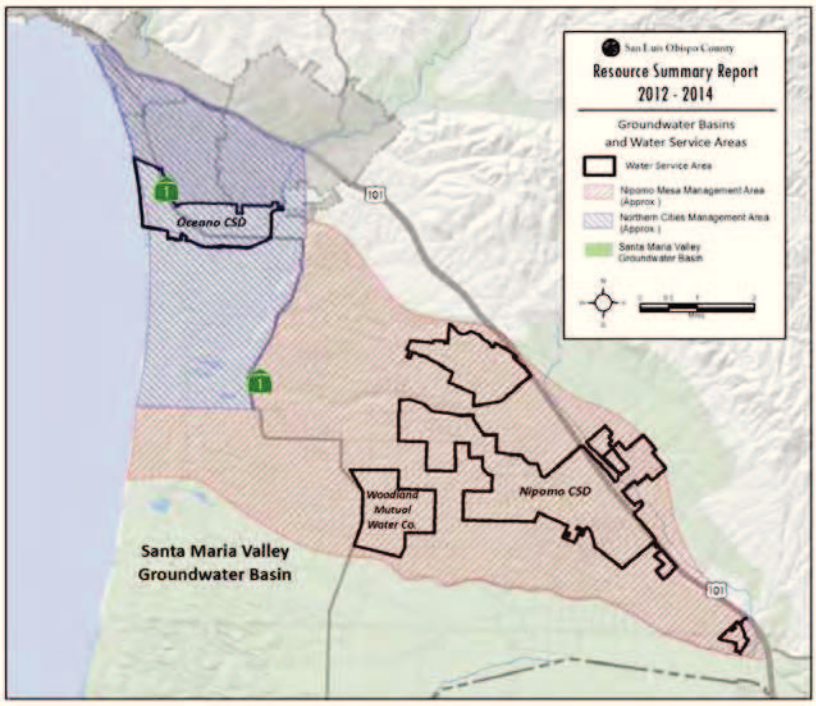

Figure 8 -- Santa Maria Valley Groundwater Basin, Management Areas and Water Purveyors

Santa Maria Valley Groundwater Basin

The Santa Maria Valley groundwater basin underlies the Santa Maria Valley in the coastal portion of northern Santa Barbara and southern San Luis Obispo Counties and serves urban users as well as overlying well users. The basin also underlies Nipomo and Tri-Cities Mesas, Arroyo Grande Plain, with sub-basins in the Nipomo, Arroyo Grande and Pismo Creek Valleys.

There are two boundaries currently in use for this basin, one defined by the California Department of Water Resources (DWR) and one defined by the Superior Court of California. The court-defined boundary was developed by a technical committee for use in basin adjudication. Three sub-basins have also been identified in San Luis Obispo County that are separated from the main basin by the Wilmar Avenue fault and are outside the area of adjudication. These are the Pismo Creek Valley (1,220 acres), Arroyo Grande Valley (3,860 acres), and Nipomo Valley (6,230 acres) Sub-basins.

The Santa Maria Valley Groundwater Basin has been adjudicated. In 2005, the Superior Court of California entered a Judgment for a basin-wide groundwater litigation case that defined three

basin management areas. These management areas are the Northern Cities Management Area (NCMA), the Nipomo Mesa Management Area (NMMA), and the Santa Maria Valley Management Area (SMVMA).

Northern Cities Management Area

The Northern Cities Management Area (NCMA) is part of the Santa Maria Valley Groundwater Basin adjudicated area. The Oceano CSD is the only water purveyor serving the unincorporated County. The 2002 Groundwater Management Agreement (the "gentlemen's agreement") among the Northern Cities which includes the cities of Arroyo Grande, Pismo Beach and Grover Beach, along with the Oceano CSD, allocates an assumed safe yield of 9,500 AFY. The safe yield included subdivisions for agricultural irrigation (5,300 AFY), subsurface flow to the ocean (200 AFY) and urban uses (4,000 AFY). It also provided that urban groundwater allocations can be increased when land within the incorporated boundaries is converted from agricultural uses to urban uses, referred to as an agricultural conversion credit, or "ag credit." The 2010 Annual Report for the Northern Cities Management Area (NCMA) summarizes the groundwater allocations for the Northern Cities as follows:

Table II-12 -- Allocation of Water Among Parties to The 2002 Northern Cities Management Agreement

Urban Area	Allotment (AFY)	Ag Credit (AFY)	Total (AFY)
Arroyo Grande	1,202	112	1,314
Grover Beach	1,198	209	1,407
Pismo Beach	700	0	700
Oceano CSD	900	0	900
Total:	4,000	321	4,321

Source: San Luis Obispo County Master Water Report, 2012, page 4-30

The Arroyo Grande Plain Hydrologic Sub-area (part of the Santa Maria Valley Groundwater Basin) provides from 30 to 100 percent of the water supply for the urban users. The only water purveyor serving the unincorporated areas of the Northern Cities Management Area is the Oceano CSD. However, the groundwater extraction rights are shared by agreement with Pismo Beach, the City of Arroyo Grande, the City of Grover Beach, and the Oceano CSD. As party to the Santa Maria Valley Groundwater Basin litigation, extraction rights may be increased or decreased at a future date. Groundwater availability in the NCMA is primarily constrained by water quality issues and water rights. The major purveyors have agreed to share the water resources through a cooperative agreement that also sets aside water for agricultural use and for basin outflow, although the amount allocated for basin outflow has been deemed unreasonably low (Todd, 2007). Following the detection of evidence of seawater intrusion in 2009, the NCMA water purveyors worked cooperatively with each other and the County to reduce groundwater pumping. The improvement of water quality after 2009, however, also coincided with a subsequent average rainfall year (2010) and well head improvements to the monitoring well to reduce possible surface water contamination. As a result, Oceano CSD does not believe that the sea water intrusion evidence is conclusive and is developing its own groundwater elevation monitoring to more closely evaluate pumping in comparison to groundwater levels and water quality changes.

Water availability in the NCMA is primarily constrained by water quality issues and water rights.

Basin sediments in the management area extend offshore along several miles of coastline, where sea water intrusion is the greatest potential threat to the supply. Low coastal groundwater levels indicated a potential for seawater intrusion that was locally manifested in sentry wells 32S/13E N02 and N03 in 2009 after 3 dry years, with levels and water quality improving after an average rainfall year in 2010. The major purveyors have agreed to share the water resources through a cooperative agreement that also sets aside water for agricultural use and for basin outflow. Following the detection of evidence of seawater intrusion in 2009, the NCMA water purveyors worked cooperatively with each other and the District to reduce groundwater pumping. This approach included the following management strategies:

- Increased surface water use through delivery of surplus supplies from Lopez reservoir
- Expanded conservation programs and customer education
- Negotiations to secure an emergency allocation of additional State Water Project supplies, if needed
- Hydraulic evaluation and maintenance of the Lopez pipeline
- Increased groundwater monitoring
- Expanded regional cooperation

Going forward, the NCMA water purveyors plan to implement several initiatives to improve the long-term sustainability of their water supplies. These initiatives could include:

- Development of a groundwater model for the Santa Maria Valley Groundwater Basin
- ~~Pursuit of additional permanent and emergency allocations of State Water Project supplies~~
- Enhanced conjunctive use of the groundwater basin
- Regional recycled water projects

Comment [PAO1]: Who is doing this? Prior efforts have been terminated.

Oceano CSD maintains adequate supply to meet existing and forecast build-out demands. With sufficient conservation, Oceano CSD should have adequate supply to not only meet its customer's needs, but also maintain a reliability supply. ~~Oceano CSD's participation in the County's drought buffer program for State Water would improve water supply reliability in the event of drastic cut backs in State Water Project supplies.~~

Comment [PAO2]: This is not necessary unless the County sells its excess Table "A" Allocation because that excess allocation provides reliability to OCSD. The drought buffer agreements protect purveyors against a County sale, but even then, the existing Board of Supervisors policy is to provide a first right of refusal. Therefore, the statement that drought buffer is needed to improve reliability is not true. Indeed, with drastic cutbacks, State Water has been available to the degree needed by OCSD.

Water demand projected over 20 years will not equal or exceed the estimated dependable supply for the Northern Cities Management Area. No recommended Level of Severity.

Table II-13 – Santa Maria Groundwater Basin -- Northern Cities Management Area Existing and Forecasted Water Supply and Demand			
Demand	**Oceano CSD**	**Agriculture**	**Rural**
Current Demand (AFY)	832.8[1]	2,056	38
Forecast Demand in 15 Years (AFY)	909.5	2,399	38
Forecast Demand in 20 Years (AFY)	973.9	2,513	38
Buildout Demand (30 Or More Years) (AFY)	1,277 -1,419[2]	2,742	38
Supply			
State Water Project (AFY)[3]	495[4]	0	0
Lopez Lake Reservoir (AFY)	303	0	0
Santa Maria Valley Groundwater Basin -- Arroyo Grande Plain Sub-Area (AFY)[5]	900	5,300[7]	36
Transfers[6]	-100	0	0
Total Supply:	1,598	Uncertain	Uncertain
Water Supply Versus Forecast Demand	Water demand projected over 20 years will not equal or exceed the estimated dependable supply.[8]		

Sources: Water System Usage forms: July 2012 – June 2013; July 2013 – June 2014, San Luis Obispo County Master Water Report, 2012, Table 4.60

Notes:

1. See Table II-1. Current year data for agriculture and rural are from 2012.
2. Ten percent additional water conservation (beyond what has already been accomplished) assumed for the low end of the forecast build-out demand, except for Grover Beach, which assumed 20% additional reduction.
3. State Water Project average allocation assumed 66 percent of contract water service amount.
4. ~~Oceano CSD has a 750 AFY allocation, but no drought buffer. Therefore, the 66 percent assumption for State Water Project delivery is 495 AFY.~~
5. ~~4.~~ Safe yield of 9,500 AFY with subdivisions for applied irrigation (5,300 AFY), subsurface outflow to the ocean (200 AFY), and urban use (4,000 AFY). The 2002 Groundwater Management Agreement safe yield allotment for urban use is broken down per the number shown.
6. ~~Arroyo Grande has an active agreement to purchase 100 AFY of Oceano CSD supplies from groundwater or Lopez Lake water. This temporary agreement ends in 2014.~~
7. ~~5.~~ Safe yield of 9,500 AFY with subdivisions for applied irrigation (5,300 AFY), subsurface outflow to the ocean (200 AFY), and urban use (4,000 AFY). The 2002 Groundwater Management Agreement safe yield allotment for urban use is broken down per the numbers shown.
8. ~~6.~~ NCMA cities, NMMA cities, County, District, and local land owners actively and cooperatively manage surface and groundwater with the goal of preserving the long-term integrity of water supplies in the NCMA and NMMA.

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Comment [PAO3]: This is not valid since OCSD does have the current contractual ability to rely on the County's excess Table A allocation for water supply reliability.

Comment [PAO4]: This agreement terminated and the information needs to be up to date.

Nipomo Mesa Management Area

Groundwater is pumped from the Nipomo Mesa Hydrologic Sub-area that is part of the Santa Maria Valley Groundwater Basin. Litigation involving use of this groundwater basin, which began in 1997, has resulted in stipulations and judgments in 2005 and 2008. As party to the Santa Maria Groundwater Basin litigation, extraction rights for Golden State Water Company, Rural Water Company, Woodlands Mutual Water Co., ConocoPhillips and Nipomo CSD may be affected at a future date. In addition, the stipulated judgment required these users (except for ConocoPhillips) to develop alternative sources to import a minimum of 2,500 AFY. The primary

constraints on water availability in the NMMA are physical limitations to the east, water quality on the west, and water rights.

Even with additional conservation measures in place, Golden State Water Company, Rural Water Company, Woodlands MWC, and Nipomo CSD could experience supply deficits if groundwater is insufficient to meet increases in demands. To address this need, recycled water, investigating other groundwater supply sources, and increasing delivery from the Nipomo Supplemental Water Project (discussed below) are considered the most feasible water management strategy options to consider implementing.

Nipomo Supplemental Water Project. The Nipomo CSD has investigated multiple sources of supplemental water and, as a result, signed an agreement with the City of Santa Maria to pursue an intertie project. The January 5, 2010 Wholesale Water Supply Agreement established the basis for purchase and delivery of water from the City to the Nipomo CSD. The project is currently under construction. When completed, it will be capable of delivering up to 3,000 AFY and could be completed in two and a half years. Once the supplemental water system is in place, Nipomo CSD will be required to purchase 2,167 AFY of that supply. Three other water purveyors, Woodlands MWC, Golden State Water Company, and Rural Water Company will share in the project costs and will together receive one-third of the mandated minimum water delivery (833 of 2,500 AFY). The additional 500 AFY capacity has been reserved for use by the Nipomo CSD for infill but no annexations or General Plan Amendments may use this water. Additional water via the City of Santa Maria (if possible), desalination and recycled water are also being considered as a long-term alternative source for the Nipomo CSD and others in the region.

Comment [PAO5]: This discussion does not provide current status, the phasing and funding issues. Is the timeline still valid? An update to this discussion is warranted.

Although the Santa Maria Groundwater Basin has been adjudicated, the potential for shortfalls to purveyors and overlying users that continue to rely primarily on groundwater remains. The NMMA, the County, and local land owners actively and cooperatively manage surface and groundwater with the goal of preserving the long-term integrity of water supplies in the NMMA. However, uncertainties remain about the reliability of water resources serving the Nipomo Mesa Management Area. Consequently, collaboration between NMMA, NCMA and South County Sanitation District should be pursued in considering recycled water as an option to improve water resource reliability and pursuit of State grants.

Water demand projected over 15 years is projected to equal or exceed the estimated dependable supply. **Recommended Level of Severity III**

Table II-13 -- Santa Maria Valley Groundwater Basin – Nipomo Mesa Management Area Existing and Forecasted Water Supply and Demand

Demand	Nipomo CSD	Woodlands Mutual Water Co.	Agriculture	Rural
Current Demand (AFY)[1]	2,517.0	849.3	3,800	1,700
Forecast Demand in 15 Years (AFY)	2,790.5	895.6	4,050	1,700
Forecast Demand in 20 Years (AFY)	2,906.3	932.8	4,133.3	1,700
Buildout Demand (30 Or More Years) (AFY)	2,984[2]	1,440-1,600[2]	3,800-4,300	1,700
Supply				
State Water Project (AFY)[3]	0	0	0	0
Lopez Lake Reservoir (AFY)	0	0	0	0
Santa Maria Valley Groundwater Basin -- Arroyo Grande Plain Sub-Area (AFY)[4]	0	0	0	0
Transfers[5]	0	0	0	0
Nipomo Supplemental Water Project (AFY)[6]	2,157	417	0	0
Santa Maria Valley Groundwater Basin -- Nipomo Mesa Sub-Area (AFY)	457	365	4,300	1,700
Recycled Water (AFY)	60-74	24-28	0	0
Total Supply:	2,698	810	Uncertain	Uncertain
Water Supply Versus Forecast Demand	Water demand projected over 15 years is projected to equal or exceed the estimated dependable supply.[7]			

Sources: Water System Usage forms: July 2012 – June 2013; July 2013 – June 2014, San Luis Obispo County Master Water Report, 2012, Table 4.60

Notes:

1. See Table II-1. Current year data for agriculture and rural are from 2012.
2. Ten percent additional water conservation (beyond what has already been accomplished) assumed for the low end of the forecast build-out demand, except for Grover Beach, which assumed 20% additional reduction.
3. ~~State Water Project average allocation assumed 66 percent of contract water service amount.~~
4. ~~Safe yield of 9,500 AFY with subdivisions for applied irrigation (5,300 AFY), subsurface outflow to the ocean (200 AFY), and urban use (4,000 AFY). The 2002 Groundwater Management Agreement safe yield allotment for urban use is broken down per the number shown.~~
5. ~~Arroyo Grande has an active agreement to purchase 100 AFY of Oceano CSD supplies from groundwater or Lopez Lake water. This temporary agreement ends in 2014.~~
6. ~~6.~~3. Nipomo supplemental water project includes Nipomo CSD, Woodlands MWC, Golden State Water Company, and Rural Water Company. Nipomo CSD will receive approximately 1,667 AFY and has reserved an additional 500 AFY. The other three will receive 833 AFY.
7. ~~7.~~4. The NCMA cities, NMMA cities, County, District, and local land owners actively and cooperatively manage surface and groundwater with the goal of preserving the long-term integrity of water supplies in the NCMA and NMMA.

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Oceano/Nipomo Area Water Systems

Nipomo CSD is currently constructing the Supplemental Water Project, described above. No other significant water system improvements or limitations were reported. No recommended Levels of Severity.

Summary of Recommended Levels of Severity

Water Supply

Table II-18 -- Summary of Recommended Levels of Severity	
Groundwater Basins and Affected Water Purveyors	**Recommended LOS**
Pico Creek Valley Groundwater Basin *Water Purveyors* San Simeon CSD	**III**
San Simeon Valley Groundwater Basin Santa Rosa Valley Groundwater Basin *Water Purveyors* Cambria CSD	**III** **III**
Cayucos Valley Groundwater Basin Old Valley Groundwater Basin *Water Purveyors* CSA 10A Morro Rock Mutual Water Co. Paso Robles Water Assoc.	None None
Los Osos Valley Groundwater Basin *Water Purveyors* Los Osos CSD S&T Mutual Water Co. Golden State Water Co.	**III**
San Luis Obispo Valley Groundwater Basin – San Luis Sub-basin San Luis Obispo Valley Groundwater Basin – Avila Valley Sub-basin *Water Purveyors* Avila Beach CSD Avila Valley Mutual Water Co. San Miguelito Mutual Water Co. CSA 12	None None
Santa Maria Valley Groundwater Basin – Northern Cities Management Area Santa Maria Valley Groundwater Basin – Nipomo Mesa Management Area	None **III**

Table II-18 -- Summary of Recommended Levels of Severity	
Groundwater Basins and Affected Water Purveyors	**Recommended LOS**
Water Purveyors Nipomo CSD Woodlands Mutual Water Co. Oceano CSD	
Santa Margarita Groundwater Basin *Water Purveyors* CSA 23	**III**
Paso Robles Groundwater Basin *Water Purveyors* San Miguel CSD CSA 16 – Shandon	**III**
Paso Robles Groundwater Basin – Atascadero Sub-basin *Water Purveyors* Templeton CSD	**III**
Lake Nacimiento Area *Water Purveyors* Heritage Ranch CSD Nacimiento Water Co.	None

Water Systems

No Levels of Severity are recommended.

Recommended Actions

General Recommendations

- Continue to support efforts to improve water conservation, the efficient use of water, and water re-use.
- Continue to collect development impact fees for the construction of water supply infrastructure.
- Support efforts to complete a Basin Management Plan for the Los Osos Groundwater Basin and the Paso Robles Groundwater Basin.
- Support efforts to develop sustainable supplemental sources of water.

San Simeon Valley and Santa Rosa Valley Groundwater Basins (Cambria)

1. LOS III to remain in place.

2. Collaborate with the Cambria Community Services District to address issuance of a limited number of intent-to-serve letters and building permits based on the aggressive water conservation program developed by Maddaus Water Management, Inc.

3. Collaborate with the Cambria Community Services District to revise the County Growth Management Ordinance to reflect the issuance of a small number of building permits for new development as part of a temporary pilot program.

4. Collaborate with the Cambria Community Services District to prepare a CEQA determination, with the County acting as a Responsible Agency, that identifies the potentially significant impacts of a temporary, small scale pilot program to issue intent-to-serve letters and building permits for new development.

Cayucos Valley and Old Valley Groundwater Basins (Cayucos)

1. Support efforts to secure an alternative supply as a reliability reserve, perhaps through the acquisition of an additional allocation from the Nacimiento Water Project.

Los Osos Groundwater Basin

1. LOS III to remain in place.

2. Continue to support efforts to complete and implement a Basin Management Plan.

3. Support efforts to complete the wastewater project.

San Luis Obispo Valley Groundwater Basin

1. Support efforts to determine the safe yield of the Avila Valley Sub-basin.

Santa Maria Valley groundwater Basin (Nipomo Mesa Area)

1. Consider ending the Title 8 retrofit-upon-sale ordinance in the NMWCA. The program has run for four years and approximately 5% of homes have needed retrofitting.

2. Follow the progress of the *Supplemental Water Alternatives Evaluation Committee*. Coordinate any needed County actions such as an AB 1600 study to quantify the costs and benefits of the identified supplemental water project for groundwater users outside the Nipomo CSD.

3. Collaborate with the Nipomo CSD and other stakeholders to assist in their efforts to address area wide water issues.

4. Continue to help fund area wide water conservation through the fee on new construction.

5. Collaborate with NCMA and NMMA on groundwater monitoring and modeling consistent with Board direction in August 2014 and with South County Sanitation District on recycled water.

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~~4.~~

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Paso Robles Groundwater Basin

1. LOS III for the Basin as a whole and for the Atascadero Sub-basin.
2. Continue to support efforts to complete and implement a Basin Management Plan.

Santa Margarita Groundwater Basin

1. Recommended LOS II.
2. Support efforts to determine the safe yield of the Santa Margarita Groundwater Basin.
3. Support efforts to develop additional sustainable water supplies for CSA 23.

Fw: Draft Resource Summary Report of the RMS
Glenn D Marshall to: Michelle Matson 01/26/2015 07:36 AM
Cc: Dave Flynn, Jeremy Ghent, Frank Honeycutt, Brian Pedrotti

From: Glenn D Marshall/PubWorks/COSLO
To: Michelle Matson/PubWorks/COSLO@Wings
Cc: Dave Flynn/PubWorks/COSLO@Wings, Jeremy Ghent/PubWorks/COSLO@Wings, Frank Honeycutt/PubWorks/COSLO@Wings, Brian Pedrotti/Planning/COSLO@Wings

Michelle:
Can you look over the Roads section of the Draft Resource Summary Report then provide any comments to Frank H for his response back to Planning?

In scanning the document I had a few comments:
1. ALL of South Bay Blvd, - I would have thought capacity issues would just be along that narrow/curvy section adjacent to the estuary
2. Halcyon Road (grade) - I thought this was more of a safety issue then a capacity issue.
3. Page 113, San Luis Bay Drive, replace "constriction" with "construction"? Note that a 5-year circulation study is currently being prepared.
4. Page 113, Avila Beach Drive, replace "constriction" with "construction"? Note that a 5-year circulation study is currently being prepared. Also note that Caltrans will be taking the lead on identifying operational improvements.
5. Page 116, do the Los Berros NB ramps really operate at LOS D?
6. Page 117. Scratch bridge widening. I don't think we will be pursuing Tefft St overpass bridge widening. There are other operational improvements we will be doing long before we attempt to widen the bridge.
7. Page 118. Remove roundabouts and replace with County coordinating operational improvements with Caltrans. Alternatives to consider may include roundabouts.

2012-2014 RSR -- IV.pdf

Link to entire document:
http://www.slocounty.ca.gov/planning/General_Plan__Ordinances_and_Elements/Plans_in_Process_and_Draft_Plans/stratgrowth/2012-2014_RSR_--_Public_Review_Draft_1-13-15.htm

Thanks,
-Glenn

Glenn D. Marshall, RCE
Transportation Division
County of San Luis Obispo Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408
Phone: 805/781-5269
Email: gdmarshall@co.slo.ca.us
Web: http://www.slocounty.ca.gov/PW.htm
----- Forwarded by Glenn D Marshall/PubWorks/COSLO on 01/26/2015 07:16 AM -----

From: Brian Pedrotti/Planning/COSLO
To: runhartig@gmail.com, jcarsel@aol.com, salyons@airspeedwireless.net,

	Whitewrites2@Charter.net, vickilocacchair@earthlink.net, thefoz@att.net, hguiton@aol.com, michaelj.sanders9@gmail.com, joe.smaac@gmail.com, Shandoncouncil@yahoo.com, saries4u@gmail.com, david14larue@gmail.com, jneil@amwc.us, cpowers@amwc.us, avilacsd@gmail.com, johnw@wallacegroup.us, cvcsd3094@gmail.com, mmiller@cambriacsd.org, cupthegrove@cambriacsd.org, bgresens@cambriacsd.org, hholmes@cambria-healthcare.org, cayucosfire@sbcglobal.net, cayucosfiredept@sbcglobal.net, Thepopester69@hotmail.com, arebich@cayucossd.org, rkoon@cayucossd.org, cmbcemetery0959@att.net, nsmith@coastalrcd.org, panachevines@gmail.com, bpearson@fivecitiesfire.org, manager@gfcwd.org, ldees@gswater.com, wwoodard@gswater.com, dlocklar@gswater.com, greenrivermutual@gmail.com, contact.us@heritageranchcsd.com, johne@iranch.org, linnecsd@hotmail.com, mfalkner@losososcsd.org, robm@wallacegroup.us, morrorockmutual@sbcglobal.net, mlebrun@ncsd.ca.gov, lbognuda@ncsd.ca.gov, celia@oceanocsd.org, prbeachwater@sbcglobal.net, ruralwater@me.com, dan.gilmore@sanmiguelcsd.org, kdodds@sanmiguelcsd.org, firechief@sanmiguelcsd.org, medson@smmwc.com, sansimeoncommunityservices@yahoo.com, smcsa23@yahoo.com, smv7800@hotmail.com, johne@squirecannyoncsd.com, jclemons@sslocsd.us, jbriltz@templetoncsd.org, TLM@templetoncsd.org, KHix@templetoncsd.org, bwall@templetoncsd.org, utilities@templetoncsd.org, admin@us-ltrcd.org, aarlingenet_apcd@co.slo.ca.us jerilyn.moore@fire.ca.gov, Elizabeth Kavanaugh/GenSrvcs/COSLO@Wings, scooper@co.slo.ca.us, Frank Honeycutt/PubWorks/COSLO@Wings, Dave Flynn/PubWorks/COSLO@Wings, Glenn D Marshall/PubWorks/COSLO@Wings
Cc:	Trevor Keith/Planning/COSLO@Wings, James Bergman/Planning/COSLO@Wings, Mike Wulkan/Planning/COSLO@Wings
Date:	01/23/2015 04:44 PM
Subject:	Draft Resource Summary Report of the RMS

To all interested parties-

The Public Draft 2012/2014 Draft Resource Management System (RMS) Biennial Report, also known as the Resource Summary Report (RSR) is now available on the County website at the link below. Follow the link under "News and Announcements" titled, "Public Draft of the 2012-2014 Resource Summary Report is now available."

The RSR is one of the key parts of the Resource Management System (RMS), which is described in Framework for Planning, Part I of the Land Use Element of the County General Plan. In addition to providing an updated analysis of the various resources and recommended Levels of Severity, the 2012-2014 RSR differs from the 2010-2012 RSR in that:

- The discussion of resources and Levels of Severity is organized by resource, rather than by community and region.
- The RSR includes many more maps and illustrations where necessary for geographic context, including the boundaries of major water purveyors.
- The RSR includes new criteria used for assessing Levels of Severity, as well as recommended actions, as adopted by the Board of Supervisors in December 2014 (as part of the revisions to the RMS). In particular, the revisions include 1) extending the lead times for water supply, 2) changes to the lead times for wastewater to correspond to the established times used by the Regional Water Quality Control Board, 3) new criteria and actions for highway interchanges, and 4) new criteria and actions for parks. These new criteria have also resulted in additional recommended LOS IIIs for water supply.

Please provide any comments to project manager Brian Pedrotti (805-788-2788 or bpedrotti@co.slo.ca.us) by February 15, 2015. The item is tentatively scheduled for the Board of Supervisors on March 10, 2015.

Feel free to contact me if you have any questions.

Brian Pedrotti, AICP
San Luis Obispo County
Department of Planning & Building
(805) 788-2788
bpedrotti@co.slo.ca.us

http://www.slocounty.ca.gov/Page775.aspx

Draft Resource Summary Report of the RMS

Frank Brommenschenkel to: bpedrotti 01/26/2015 10:44 AM

From: "Frank Brommenschenkel" <frank.brommen@verizon.net>
To: <bpedrotti@co.slo.ca.us>

Brian,
Question, Rural Water Company is listed in Table II-2 Groundwater Basins, but is not listed in Figure II-1 Water Purveyors Discussed, nor in Table I-1? Just curious as to why?
Also the Golden State Water Company is not listed for the service area next to Woodlands.
Perhaps you were only looking at Mutual companies and public agencies?
I was reviewing the document on behalf of the Rural Water Company.

Frank Brommenschenkel
Frank B & Associates
Water Management Consulting
134 Davis St
Santa Paula, CA 93060
frank.brommen@verizon.net
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March 3, 2015

Via Email Only

tcarmel@carnaclaw.com

Mr. Brian Pedrotti, AICP
Planning and Building Department
bpedrotti@co.slo.ca.us

RE: DRAFT RESOURCES SUMMARY REPORT COMMENTS

- *San Miguelito Mutual Water Company*

Dear Mr. Pedrotti:

We appreciate the opportunity to review the County's draft 2012/2014 Resource Management System (RMS) biennial report. Please see the San Miguelito Mutual Water Company's ("SMMWC") comments and proposed changes in the attached redlined document.

Please let me know if you have any questions or concerns regarding the changes. Your attention to this matter is appreciated.

Sincerely,

CARMEL & NACCASHA LLP

Timothy J. Carmel
General Counsel

TJC:li
Encl.
Cc: Richard Koon

Water Purveyors Serving the Unincorporated County

Water purveyors serving the unincorporated county are summarized on Table II-1 and shown on Figure II-1.

Table II-1 – Water Purveyors Serving the Unincorporated County

Community	Water Purveyors	Approx. Population Served (2014)	2012-13 Water Deliveries (AFY)[4]	2013-14 Water Deliveries (AFY)
Avila Beach Avila Valley	Avila CSD Avila Valley Mutual Water Co. San Miguelito Mutual Water Co.	450 112 1,200	(1) 35.9 ~~(1)~~168.9	86.6 48.1 179.5
Cambria	Cambria CSD	6,031	(1)	555.1
Cayucos	CSA 10A Morro Rock Mutual Water Co. Paso Robles Beach Water Assoc.	2,185	110.1 115.6 151.2	112.0 115.4 149.9
Edna Valley	Golden State Water Co.	1,960	297.9	286.8
Heritage Ranch	Heritage Ranch CSD	3,500	533.6	461.3
Los Osos	Los Osos CSD Golden State Water Co. S&T Mutual Water Co.	7,086 8,824 (1)	670.8 675.5 (1)	645.1 649.8 (1)
Nipomo	Nipomo CSD Woodland Mutual Water Co.	12,484 1,200	2,376.4 864.5	2,517.0 849.3
Oceano	Oceano CSD	7,294	829.1	832.8
Santa Margarita	CSA 23	1,265	156.1	157.2
San Miguel	San Miguel CSD	2,413	309.8	312.1
San Simeon	San Simeon CSD	462	(1)	72.1
Shandon	CSA 16	1,260	109.7	142.3
Templeton	Templeton CSD	6,885	(1)	1,344.3

Source: San Luis Obispo County Flood Control and Water Conservation District, 2014
Notes:
1. No data reported.

[4] Acre feet per year. An acre-foot is 325,851.4 gallons.

There were a total of six discharge violations reported for the period 2012-2014. No surface water bodies were affected; all spills were associated with root intrusion and pipe structural problems which have since been addressed.

~~The SMMWC has no plans to expand or upgrade the collection system, treatment plant or disposal system~~SMMWC replaced approximately 60% of its force mains during the period of 2012-2014. No recommended levels of severity for either collection or treatment. See Figure III-2.

Table III-11 -- San Miguelito Mutual Water Company -- Recommended Levels of Severity for Wastewater Treatment

2014 Service Area Population	2014 Average Daily Flow (MGD)	2020 Service Area Population	2020 Estimated Average Daily Flow (MGD)	Design Flow[1] (MGD)[2]	Percent of Design Flow In 2020	Recommended Levels of Severity
~~612~~1200	0.08	~~630~~1235	0.082	0.15	55%	None

Sources: San Luis Obispo County Department of Public Works, 2014; Central Coast RWQCB, 2014; SLOCOG, 2014

Notes:
1. Design Flow = average daily dry weather flow in million gallons per day.
2. MGD = Million gallons per day

San Simeon CSD

The San Simeon CSD operates a wastewater collection, treatment and disposal system that serves the community of San Simeon as well as Hearst Ranch. By agreement, Hearst Castle is allotted 0.05 MGD of the San Simeon treatment plant capacity. The treatment plant has a design flow of 0.2 MGD; current (2014) average daily flows are 0.085 MGD, or 43% of design capacity. Based on the projected growth in population within the CSD service area, the plant is expected to operate well below capacity for the next five years or more.

No discharge violations were reported for the period of 2012 – 2014.

The CSD has no plans to expand or upgrade the collection system, treatment plant or disposal system. No levels of severity are recommended for either collection or treatment.

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Agency	2014 Service Area Population	2014 Average Daily Flow (MGD)	2014 Per Capita Average Daily Flow (MGD)	2020 Service Area Population	2020 Estimated Average Daily Flow (MGD)	Design Flow[1] (MGD)[2]	Percent of Design Flow In 2020	Recommended Levels of Severity
Avila Beach CSD[3]	1,484	0.057	0.0000384	1,542	0.059	0.2	30%	None
Cambria CSD[4]	6,032	0.67	0.0001110	6,054	0.672	1.0	67%	None
Cayucos Sanitary District/Morro Bay Wastewater Treatment Plant[5]	12,710	0.964	0.0000758	12,825	0.973	2.36	41%	None
Country Club Estates – CSA 18	881	0.068	0.0000758	916	0.070	0.12	58%	None
Heritage Ranch CSD	2,450	0.14	0.0000571	2,496	0.143	0.4	36%	None
Nipomo CSD – Black Lake	854	0.052	0.0000608	840	0.051	0.10	51%	None
Nipomo CSD – Southland Treatment Plant	15,503	0.64	0.0000412	15,850	0.655	0.9	73%	None
San Miguel CSD	2,432	0.096	0.0000394	2,650	0.105	0.45	23%	None
San Miguelito Mutual Water Co.	~~612~~1200	0.08	0.~~000128~~00067	636	0.082	0.15	55%	None
San Simeon CSD	445	0.085	0.0001910	435	0.083	0.2	42%	None
South San Luis Obispo County Sanitation District[6]	37,784	2.52	0.0000666	38,815	2.59	3.3	78%	None
Oak Shores CSA[7]	348	0.032	0.0000919	362	0.033	0.1	33%	None
Templeton CSD[8]	7,099	0.016	0.0000022	7,261	0.016	0.043	38%	None

Sources: San Luis Obispo County Department of Public Works, 2014; Central Coast RWQCB, 2014; SLOCOG, 2014

Notes for Table III-2:

1. Design Flow = average daily dry weather flow in million gallons per day.
2. MGD = Million gallons per day
3. CSD = Community Services District
4. By agreement, Hearst Castle is allotted 0,05 MGD of the San Simeon treatment plant capacity.
5. The Morro Bay wastewater treatment plant serves the Cayucos Sanitary District and the City of Morro Bay. By agreement, Cayucos SD is allotted 0.721 MGD of Morro Bay treatment plant capacity.
6. South County Sanitary District serves the cities of Arroyo Grande and Grover Beach and the unincorporated community of Oceano.

~~CSA = County Service Area~~

7.
8. ~~10.~~ By agreement, Templeton CSD is allotted 0.40 MGD of the Paso Robles treatment plant capacity.

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Septic Systems

Santa Margarita

The community of Santa Margarita relies entirely on individual septic systems for wastewater disposal. Septic systems have failed in some parts of the community subject to shallow groundwater levels. According to the 2013 Santa Margarita Community Plan, the location of urban densities on clay soils, combined with poor storm drainage, have created problems for successful septic system operation. In the 1970's, septic systems in Santa Margarita had a 19 percent failure rate during periods of seasonal flooding. Since then, engineered septic systems have been required by the County, and they have shown better performance. However, the County Health Department does not administer an annual septic maintenance inspection program, and the current failure rate is not precisely known.

Drainage problems still exist in Santa Margarita. However, with suitable drainage control, the long term use of septic systems could be feasible if the systems are properly maintained by owners. Development of existing lots should provide adequate areas for leach fields and drainage control. Formation of a flood control zone of benefit would enable the community to pay the necessary costs to resolve flooding problems which in turn may help maintain septic systems in the community.

Continued development of the Santa Margarita Ranch will necessitate the construction of a centralized wastewater system. The development plan for the project includes the dedication of land for a potential future sewage treatment facility of up to ten (10) acres. The capacity, features, location and timing of this potential future sewage treatment facility have not yet been determined.

Although no public data are available regarding the failure rate of existing septic systems, previous system failures suggest this is a persistent problem which could worsen over time. **Recommended Level Of Severity I.**

Shandon

According to the 2012 Shandon Community Plan, the community is served by individual septic tank and leach field systems with a majority located on small lots. The Community Plan requires a community wastewater system to be constructed with new development. The wastewater system improvements will consist of a backbone network of gravity sewer pipelines, lift stations,

Water Rates and Rate Structure

Water Rates and Rate Structure				
Water Purveyors	**Approx. Population Served (2014)**	**Average Annual Single-Family Residence Water Use (AFY)**	**2013-2014 Water Rate Structure[1]**	**2013-2014 Average Single Family Residence Water Bill[2]**
Avila CSD	450	1.14 AFY	Flat rate by volume	$39.50 per month
Avila Valley Mutual Water Co	112	1.0 AFY	Three tiers	$200 per 2 mo. billing cycle
San Miguelito Mutual Water Co.	1~~,~~200	~~1.46~~0. 2 AFY	Tiered	$68.08
Cambria CSD	6,031	0.1 AFY	Tiered	$66.88 for 2 mo. billing cycle
CSA 10A	2,185	0.~~0~~2 AFY	Tiered	$132.84 for 2 mo. billing cycle
Morro Rock Mutual Water Co.			$48.00 per month, plus $7.17 per 1,000 gallons used	
Paso Robles Beach Water Assoc.			$33.00 per month plus $7.40 per 1,000 gallons used	
Golden State Water Co. – Edna Valley	1,960	0.41 AFY	Tiered	$269.94 for 2 mo. billing cycle
Heritage Ranch CSD	3,500	0.27 AFY	Tiered	$42.81 per month
Los Osos CSD	7,086	0.03 AFY	Four tiers	$95.41
Golden State Water Co. – Los Osos	8,824	0.19 AFY	Tiered	$144.23 for 2 mo. billing cycle
Nipomo CSD	12,484	0.52 AFY	Tiered	$115.31 per 2 mo. billing cycle
Woodland Mutual Water Co.	1,200	0.44 AFY	Flat + tiered	$67.34 per 2 mo. billing cycle
Oceano CSD	7,294	0.05 AFY	Tiered	$146.35
CSA 23 – Santa Margarita	1,265	0.045 AFY	Tiered	$97.38
San Miguel CSD	2,413	0.069 AFY	Tiered	$92.06
San Simeon CSD	462	0.045 AFY	Flat	$61.63.
CSA 16 -- Shandon	1,260	0.05 AFY	Flat	$87.45
Templeton CSD	6,885	0.49 AFY	Tiered	$63.00 per mo.

Source: Water System Usage forms: July 2012 – June 2013; July 2013 – June 2014

1. Flat, tiered, etc.
2. Dollar amount per billing cycle.

TEMPLETON COMMUNITY SERVICES DISTRICT
P.O. BOX 780 • 420 CROCKER STREET • TEMPLETON, CA 93465 • (805) 434-4900 • FAX: (805) 434-4820

February 4, 2015

Mr. Brian Pedrotti
County of San Luis Obispo
Planning Department

Subject: 2012-2014 Resource Summary Report

Dear Mr. Pedrotti:

Thank you for the opportunity to review the draft Resource Summary Report. Our comments are primarily focused on the Atascadero basin as it is an important water supply for the District. We have worked extensively with expert hydrogeologist, Paul Sorensen, P.G., CHg. in understanding the Atascadero Basin for over 30 years. Attached please find a letter written by Paul Sorensen, Principal Hydrogeologist of FUGRO, dated January 27, 2015 regarding his professional opinion on the separation of the Atascadero basin from the Paso Robles main basin. This letter was presented to the Board of Supervisors at the January 27, 2015 meeting.

We offer the following comments for your consideration:

Page 15, Table I-4

- Add "Main Basin" to Paso Robles Groundwater Basin box and delete statement including Atascadero Sub-basin in the recommended actions column.
- Add Atascadero Mutual Water Company (AMWC) as a water purveyor in the Atascadero Sub-basin.
- Increased LOS III for the Atascadero Sub-basin is not supported by the correct demand and supply figures. Correct Atascadero Sub-basin back to LOS I and continue to treat it separately from the Main Basin. The Atascadero Sub-basin is in better shape than the main basin once the corrected demand and supply figures are used. Please see discussions below and in recommended text revisions for additional discussion.

Page 22, Table II-1

- Templeton water deliveries for fiscal year 2012-13 were 1389 AF.

Pages 29 and 30

- Nacimiento Water Project. Update discussion to indicate that the Nacimiento pipeline has been constructed and water deliveries began in 2011.
- Include Atascadero Mutual Water Company in Table II-3.
- An additional table, showing all subscribers and water allocations, including surplus water still available for purchase would be informative.

Page 65

- Last paragraph is misleading. The Atascadero Sub-basin demand to supply can be evaluated separately from the main basin by correcting Table II-15. See attached redline table II-15 and comments.
- See also attached letter from Paul Sorensen regarding the separation of the Atascadero basin and the Paso Robles Basin -main basin.

Page 66

- First paragraph, first sentence - The statement, "The Atascadero Sub-basin will be included in the Basin Management Plan and groundwater management district currently being considered by the County and affected stakeholders." is incorrect. No decision has been reached whether the Sub-basin will be part of any future management district. This statement should be deleted.

Page 66, Table II-15

- Table II-15 was created by comparing demand figures from the Master Water Report Water Planning Area (WPA) 13 with supply data from the Atascadero Sub-basin. The boundary of WPA 13 is significantly larger than the sub-basin boundary, and includes significant agricultural groundwater pumping outside the sub-basin. (See attached map from the Master Water Report.) For this reason, the agricultural demand of 10,620 afy shown for the sub-basin is grossly overstated. Actual agricultural demand in the sub-basin per Todd (2009) pumping update is on the order of 1,350 afy, part of which becomes return flow.
- The rural demand is based on a demand factor of 1.7 afy/unit from previous studies. The most current model by Geoscience Support Services uses a more realistic demand factor of 0.75 afy/unit. Using this factor, rural demand is conservatively 800 afy. According Geoscience, of this amount, 38% is indoor domestic water demand and returns to the basin through onsite septic systems.
- Much of the agricultural pumping in the sub-basin is from the underflow and not the Paso Robles formation. This pumping is by the agricultural users adjacent to the Salinas River from shallow, alluvial wells. A more detailed accounting of this pumping is warranted. Using the DWR appropriation for this pumping does not take into account the pumping that is occurring under the property owners' riparian rights.
- Underflow pumping, whether municipal or agricultural, has no effect on groundwater in storage in the Paso Robles formation. This relationship between underflow pumping and water storage in the Paso Robles formation must be considered when making determinations on the impacts of groundwater pumping in the sub-basin. Underflow pumping does have a limited effect on recharge into the Paso Robles formation.

- The Supply line item labeled Recycled Water should be named Treated Wastewater Retrieval/Basin Augmentation, or simply Basin Augmentation.
- The notes to the table should identify that there is an additional 6,100 afy of surplus water available from the Nacimiento Water Project. Some of this surplus water can be utilized in the sub-basin to offset groundwater pumping. The TCSD and AMWC are currently working with the County to acquire nearly 1,120 afy of this surplus water.
- Recommend that the row labeled Other Groundwater Sources should be renamed to Other Water Supply Sources.
- Following is a more accurate representation of net pumping in the Atascadero sub-basin, and includes pumping from the Salinas River underflow. But as described above, pumping from the underflow does not have an effect on groundwater storage in the Paso Robles formation, only the rate of recharge. The table presents a very conservative, over-estimate of the net pumping in the sub-basin.

Demand (afy)	TCSD	AMWC	Paso	Ag	Rural	Total
Current, Paso Formation	680	2,153	0	605	800	**4,238**
Current, Underflow	665	3,372	3,243	745	0	**8,025**
Treated Wastewater Retrieval, Basin Augmentation	(165)	(1,500)	0	0	0	**(1,665)**
NWP	(250)	(2,000)	0	0	0	**(2,250)**
Total	**930**	**2,025**	**3,243**	**1,350**	**800**	**8,348**

SUB-BASIN PERENNIAL YIELD = 16,400

See revised Atascadero Sub-basin section incorporating the above comments and net pumping calculations for the Sub-basin only. Adjusted for net pumping, the LOS for the Atascadero Sub-basin remains a LOS I.

Page 73:
Separate Paso Robles Main Basin and the Atascadero Sub-basin. Insert the following:

Atascadero Sub-basin

1. Maintain LOS I in Atascadero Sub-basin.
2. Continue to support the efforts of the water purveyors, County, District, and local land owners to actively and cooperatively develop a Sustainable Groundwater Management Plan for the Atascadero Sub-basin.

Page 75
Amend Table III-1 to reflect the two wastewater treatment areas and flows within the District.

Templeton CSD[8]				
Meadowbrook WWTP	5-11-2007	0.600	0.16	27%
Paso Robles WWTP (9%)	6-25-2011	0.443	0.220	50%

Page 92

- Update this section. The City of Paso Robles is in the process of constructing a new 5 MGD WWTP and plant system start up is well underway.
- Revise the table to reflect the two wastewater treatment areas and flows within the District.

Page 94
Revise table to include the two wastewater treatment areas and flows within the District.

Please see the attached redline and proposed revisions to the Atascadero Sub-basin section and the Templeton CSD Wastewater sections.

Please feel free to contact me at (805) 434-4915 should you have any questions or wish to discuss any of our comments further.

Sincerely,

Bettina L. Mayer, PE
District Engineer

FUGRO CONSULTANTS, INC.

660 Clarion Court, Suite A
San Luis Obispo, California 93401
Tel: (805) 542-0797
Fax: (805) 542-9311

January 27, 2015

Board of Supervisors
County of San Luis Obispo

Frank Mecham, Chairperson
Honorable Board:

My name is Paul Sorensen. I am a Principal Hydrogeologist with Fugro Consultants, and have spent much of the past 18 years working in the Paso Robles Groundwater Basin and other groundwater issues throughout the County. I was the Project Manager and lead investigator for the Fugro 2002 and Fugro 2005 Paso Robles Groundwater Basin studies, including the definition of the basin boundary, the calculation of the perennial yield, and many of the studies that have formed the foundation of much of the ongoing work today.

I'm sorry I can't be here today to speak in person, but I appreciate the opportunity to have this read into the record. I rarely speak to your Board during Public Comment sessions, because I normally let the science speak for itself, and let the policy issues develop as your Board sees fit. There are many different pathways that we may eventually find ourselves in as we move towards an eventual basin management structure. I have my personal opinions, but again, I am content to let the Board and the public lead the process, because I have a great deal of faith in the public process.

However, there is one issue that may be discussed today that I feel quite strongly about, and hope that my contribution may assist and guide the decisions that are made today or in the future. That one issue is the formal definition of the Atascadero Sub-basin as a separate Basin and a separate management area or district.

Regardless of the type of groundwater management district or agency that is eventually formed for the main part of the Paso Robles Basin, I have a very strong opinion that the Atascadero Basin should be managed separately because of its geologic and hydrogeologic separation from the main part of the Basin. We first defined the Atascadero Sub-basin in our 2002 Paso Robles Groundwater Basin Study, and since then we have performed dozens of investigations that have only strengthened my professional opinion that the Atascadero Subbasin should be formally separated from the main part of the Basin because of its distinct hydraulic separation. This conclusion has been confirmed by the most recent Basin Model Update study, and is further substantiated by inspection of water levels in wells throughout the subbasin that are different than water levels in wells east of the Rinconada fault.

I understand that your Board does not have the authority or formal ability to re-define basin boundaries apart from the DWR Bulletin 118, and that the information necessary to make a formal request to separate the basins will not be announced until January 1, 2016. However, sufficient evidence exists, in my opinion, to separate the basins and this evidence should be taken into consideration when making decisions about the formation of groundwater management districts and/or Groundwater Sustainability Agencies.

Sincerely,

FUGRO CONSULTANTS, INC.

Paul A. Sorensen, P.G., CHg.
Principal Hydrogeologist

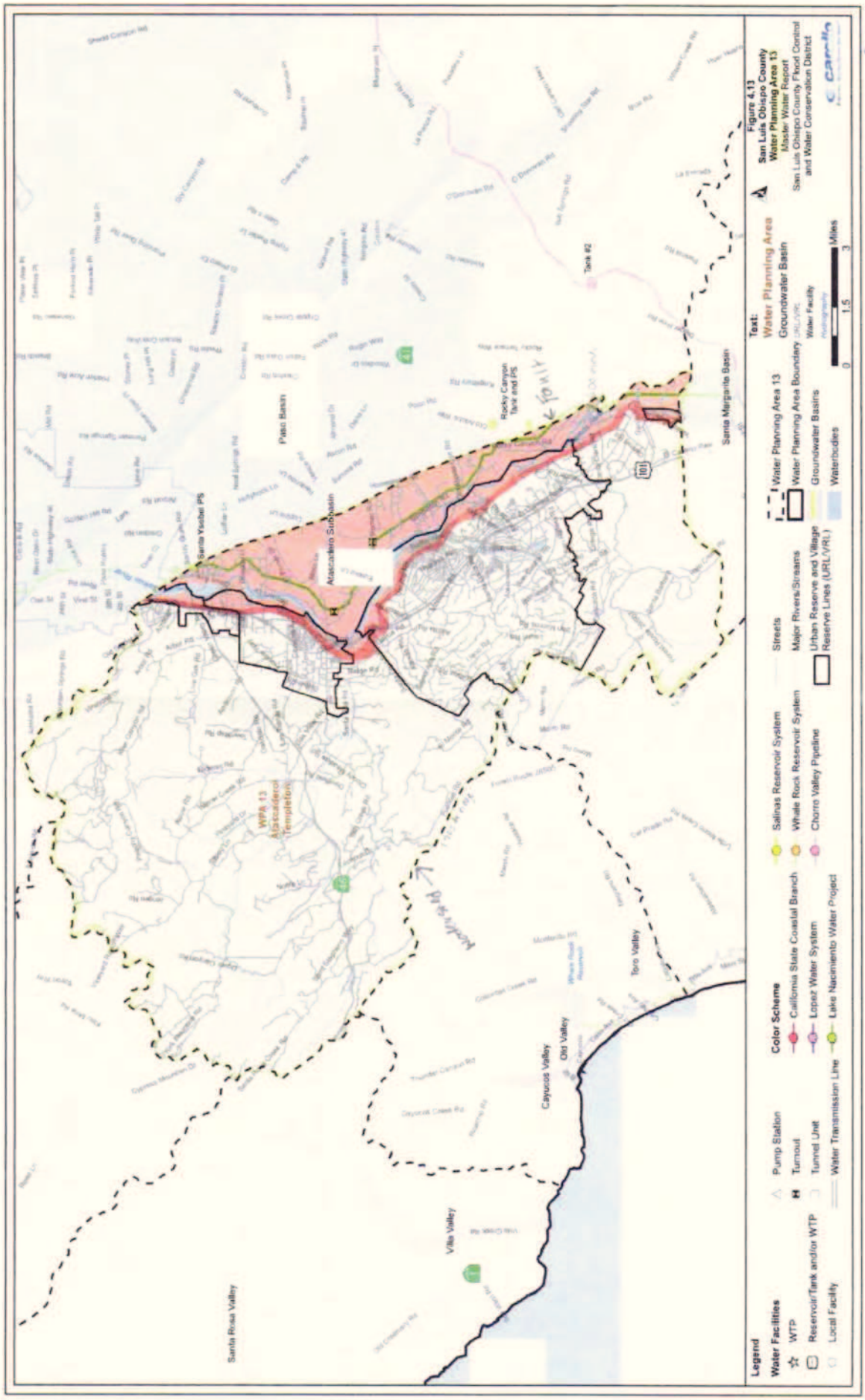
Figure 4.13
San Luis Obispo County
Water Planning Area 13
Master Water Report
San Luis Obispo County Flood Control
and Water Conservation District
Text:
Water Planning Area 13
Groundwater Basin
Water Planning Area Boundary
Groundwater Basins
Waterbodies
Water Facility
Miles
0
1.5
3
Legend
Water Facilities
WTP
Reservoir/Tank and/or WTP
Local Facility
Pump Station
Turnout
Tunnel Unit
Water Transmission Line
Color Scheme
California State Coastal Branch
Lopez Water System
Lake Nacimiento Water Project
Salinas Reservoir System
Whale Rock Reservoir System
Chorro Valley Pipeline
Streets
Major Rivers/Streams
Urban Reserve and Village
Reserve Lines (URL/VRL)
Paso Basin
Atascadero Subbasin
Santa Margarita Basin
Santa Ynez River
Santa Rosa Valley
Villa Valley
Cayucos Valley
Old Valley
Toro Valley
WPA 13
Atascadero
Templeton
Santa Ysabel PS
Rocky Canyon
Tank and PS
Tank #2
Master Water Report
Vol. 2

Table I-4 – Recommended Levels of Severity – Water Supply

Groundwater Basins and Affected Water Purveyors	Recommended LOS	Recommended Actions
		costs and benefits of the identified supplemental water project for groundwater users outside the Nipomo CSD. Collaborate with the Nipomo CSD and other stakeholders to assist in their efforts to address area wide water issues. Continue to help fund area wide water conservation through the fee on new construction.
Santa Margarita Groundwater Basin *Water Purveyors* CSA 23	III	Support efforts to determine the safe yield of the Santa Margarita Groundwater Basin. Support efforts to develop additional sustainable water supplies for CSA 23.
Paso Robles Groundwater Basin-Main Basin *Water Purveyors* San Miguel CSD CSA 16 – Shandon	III	LOS III for the Main Basin ~~as a whole and for the Atascadero Sub-basin~~. Continue to support efforts to complete and implement a Basin
Paso Robles Groundwater Basin – Atascadero Sub-basin *Water Purveyors* Atascadero Mutual Water Company (AMWC) Templeton CSD	III	LOS ~~III~~ for the ~~Basin as a whole and for the~~ Atascadero Sub-basin. Continue to support efforts to complete and implement a Basin Management Plan.
Lake Nacimiento Area *Water Purveyors* Heritage Ranch CSD Nacimiento Water Co.	None	Continue to support efforts to improve water conservation, the efficient use of water, and water re-use. Continue to collect development impact fees for the construction of water supply infrastructure. Support efforts to develop sustainable supplemental sources of water.

**Table II-2 – State Water Project Water Service Amounts (AFY)
To Water Purveyors Serving The Unincorporated County**

Contractor	Water Service Amount	Drought Buffer	Total	6 % Allocation Year	66-69% Allocation Year	100% Allocation Year
Oceano CSD	750	0	750	45	495	750
San Miguelito Mutual Water Co.	275	275	550	33	275	275
Avila Beach CSD	100	0	100	6	66	100
Avila Valley Mutual Water Co.	20	60	80	5	20	20
Shandon	100	0	100	6	66	100
Total:	1,245	335	1,580	95	922	1,245

Source: San Luis Obispo County Master Water Report, 2012, Table 4.5

Notes:

1. Minimum, average, and maximum allocations established in the State Water Project Delivery Reliability Report 2007 (August 2008), page 51, Table 6.13. This study used 66 percent for the average allocation year.

Many factors will affect future SWP deliveries to the County and SWP subcontractors within the County, including pumping restrictions for the Sacramento Delta and climate change. Estimating the delivery reliability of the SWP depends on many issues, including possible future regulatory standards in the Delta, population growth, water conservation, increased use of recycled water, drought buffer purchases, and water transfers. The DWR State Water Project Delivery Reliability Report 2007 (August 2008) estimates future (2027) SWP delivery reliability and incorporates the 2007 federal court ruling for Delta pumping and potential impacts of future climate change. When compared to previous reliability reports, total annual deliveries for 2027 show decreases in deliveries in most years if no actions are taken to address the factors causing the decrease in availability. It is important to recognize that actions to re-establish reliability are being evaluated by DWR State Water Contractors and other State and Federal agencies. Future actions may include new environmental efforts as well as infrastructure improvements envisioned when the SWP was originally scoped in the 1960s.

Nacimiento Water Project

The Monterey County Flood Control and Water Conservation District (now known as the Monterey County Water Resources Agency (MCWRA) constructed the Nacimiento Dam in 1957. The dam and reservoir continue to be operated by MCWRA. The lake has a capacity of 377,900 acre-feet (AF) and a surface area of 5,727 acres. Water is collected from a 365 square mile watershed that is comprised of grazing lands and rugged wilderness.

In 1959, the County secured the rights to 17,500 AFY from Lake Nacimiento, with 1,750 AFY reserved for lakeside users and the Heritage Ranch Community Services District (Heritage Ranch CSD). After a long series of studies and negotiations, the Nacimiento Water Project (NWP) was initiated. The project delivers raw lake water from Lake Nacimiento to communities within San Luis Obispo County. Water purveyors serving the unincorporated county who are participating

Commented [TM1]: Recommend adding a discussion updating the construction completion of the Nacimiento pipeline, current subscribers, current deliveries, proposed additional deliveries, and unallocated water that is available.

in the Nacimiento Water Project, along with their contracted water amounts, are listed in Table II-3.

Table II-3 – Allocation of Nacimiento Water Project To Participants Serving the Unincorporated County

Participants	Allocations (AFY)
Templeton CSD	250
CSA 10A (via exchange)[1]	25

Source: San Luis Obispo County Master Water Report, 2012, Table 4.6

Notes:

1. Discussed below under Whale Rock Reservoir.

Commented [TM2]: AMWC is a participant serving the unincorporated County in addition to the City of Atascadero.

Whale Rock Reservoir

Whale Rock Reservoir is located on Old Creek Road approximately one-half mile east of the community of Cayucos. The State Department of Water Resources supervised the project's planning, design, and construction. Construction took place between October 1958 and April 1961. The reservoir is jointly owned by the City of San Luis Obispo, the California Men's Colony, and Cal Poly. These three agencies, with the addition of a representative from the Department of Water Resources, form the Whale Rock Commission, which is responsible for operational policy and administration of the reservoir and related facilities. Day-to-day operation is provided by the City of San Luis Obispo.

Whale Rock reservoir is formed by an earthen dam and was able to store an estimated 40,662 acre-feet of water at the time of construction. The calculation of the yield available is coordinated with Salinas Reservoir using a safe annual yield computer model. The model also evaluates the effect of siltation. The Whale Rock Commission has budgeted for a siltation study to be undertaken in the near future.

Table II-4 summarizes the current capacity rights for the joint right-holders (downstream water rights are accounted for separately). Each rights-holder manages reservoir withdrawals individually from their available water storage allocation. The Whale Rock Commission tracks withdrawals and reports available volume on a monthly basis.

Table II-4 – Whale Rock Reservoir Allocations

Water Users	Percent	Allocations (AFY)
City of San Luis Obispo	55.05	22,383
Cal Poly	33.71	13,707
California Men's Colony	11.24	4,570
Total:	100	40,660

Source: San Luis Obispo County Master Water Report, 2012, Table 4.7

- A Draft Final Report for the Paso Robles Groundwater Basin Computer Model Update was distributed for public review and comment on November 13, 2014. Key outcomes of the model update and calibrations include the following:

  - Updated Perennial Yield Estimate for the Basin. The period of 1982 to 2010 is representative of the historical average rainfall in the Basin area. The updated estimate for the perennial yield based on that period is 89,648 acre-feet per year (AFY). For the period of 1981 to 2011, outflows exceeded inflows to the Basin by 2,473 AF on an average annual basis (i.e. more water left the Basin than was replenished). This is updated from the preliminary results presented in December 2013, which were 89,200 AFY and 2,900 AF, respectively.

  - Future Year Simulations. The model was run to evaluate the Basin's response to "no-growth" and "growth" scenarios projected over a future thirty year period. The no- growth scenario projects that outflows would exceed inflows on an average annual basis over the thirty year period by 5,592 AFY. The growth scenario projects that outflows would exceed inflows on an average annual basis over the thirty year period by 20,900 AFY.

Preliminary results of the groundwater computer model suggest that outflows from the basin currently exceed inflows. County staff are currently (December, 2014) developing recommendations for consideration by the Board of Supervisors at its January 6, ~~2014~~ 2015 meeting. The formation of a groundwater management district is currently being considered by the various affected parties and LAFCo. In the meantime the emergency ordinance remains in effect. Water demand projected over 15 years will equal or exceed the estimated dependable supply. **Recommended Level of Severity III**

Table II-16 -- Paso Robles Groundwater Basin
Existing and Forecasted Water Supply and Demand

Demand	San Miguel CSD	CSA 16 - Shandon	City of Paso Robles	Agriculture	Rural
Current Demand (AFY)	312.1[1]	142.3[1]	3,569	67,610	3,590
Forecast Demand in 15 Years (AFY)	447.1	621.2	6,670	77,215	4,910
Forecast Demand in 20 Years (AFY)	492	780.8	7,704	80,416.7	5,350
Buildout Demand (30 Or More Years) (AFY)	466-582[2]	271-1,100[3]	8,422-9,772	60,740-86,820	5,570-6,230
Supply					
Paso Robles Groundwater Basin[8] (AFY)					
Paso Robles Formation (AFY)	235	147	2,856	(6)	(6)
Salinas River Underflow (AFY)	0	0	537/872[10]	738[7]	0
Other Groundwater Sources (AFY)	0	0	0	Uncertain	Uncertain
State Water Project (AFY)	0	66[4]	0	0	0
Nacimiento Project	0	0	4,000	0	0
Total Supply:	235	213	7,728	Uncertain	Uncertain
Water Supply Versus Forecast Demand	Water demand projected over 15 years will equal or exceed the estimated dependable supply.[5]				

Sources: Water System Usage forms: July 2012 – June 2013; July 2013 – June 2014, San Luis Obispo County Master Water Report, 2012, Table 4.67

Notes:

1. See Table II-1. Current year data for agriculture and rural are from 2012.
2. Twenty (20) percent additional water conservation (beyond what has already been accomplished) assumed for the low end of the forecast build-out demand for San Miguel and 10% for Paso Robles.
3. Upper end of the range reflects demand projected in accordance with the draft Shandon Community Plan should it be approved by the Board of Supervisors in the future.
4. CSA 16 has an allocation of 100 AFY of State Water Project (but no drought buffer), but has not developed this supply due to high cost. State Water Project average allocation assumed 66 percent of contract water service amount, which equates to 66 AFY.
5. Including demand in the Monterey County portion of the basin, and depending on the estimated use for the Agricultural and Rural sectors and future hydrology, basin studies are indicating that the perennial yield may be exceeded in the future. The agencies, County, District, and local land owners intend to actively and cooperatively manage the groundwater basin via the development of a Groundwater Management Plan. It is possible that a future supply deficit will exist for agriculture and rural users because the forecast agricultural and rural demands, excluding demands in the Monterey County portion of the basin, exceed the basin yield. It is uncertain how much of the rural and agricultural demand is supplied by sources outside the basin.
6. It is assumed that the majority of water supply for agriculture and rural users comes from the Paso Robles Groundwater Basin.
7. SWRCB records indicate that 738 AFY could be diverted from the Salinas River (direct diversion or underflow). It is assumed that the entire amount is used for agriculture.
8. The safe yield of the Paso Robles Groundwater Basin is currently being updated
9. It was assumed that Paso Robles currently extracts one-half of its current groundwater demand and one-half of its total future groundwater demand from the Atascadero Sub-basin.

10. The City of Paso Robles is permitted to extract up to 8 cfs (3,590 gpm) with a maximum extraction of 4,600 AFY (January 1 to December 31). For the purposes of this analysis, it was assumed that half (4,063 AFY) of the existing demand of 8,126 AFY was extracted from the Salinas River Underflow via the Thunderbird Wellfied

The Atascadero Sub-basin of the Paso Robles Groundwater Basin

The Atascadero Sub-basin is a sub-basin of the Paso Robles Groundwater Basin. The eastern boundary is the Rinconada fault. Because the fault displaces the Paso Robles Formation, the hydraulic connection between the aquifer across the Rinconada fault has been considered sufficient to warrant the classification of this area as a distinct sub-basin. Therefore, the Atascadero ~~Groundwater~~ Sub-basin is defined as that portion of the basin west of the Rinconada fault.

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Primary constraints on water availability in the sub-basin include water rights and physical limitations. The rights to surface water flows in the Salinas River and associated pumping from the alluvium (Salinas River Underflow) have been fully appropriated by the State Water Resources Control Board (State Board) and no plans exist to increase these rights beyond the current allocations. Full appropriation implies that no additional rights to the Salinas River flows are being issued by the State Board at this time nor is any additional pumping for existing rights being granted. Therefore, the Salinas River does not represent a future source of additional water supply that can be developed beyond its present appropriation. However, pumping from the Salinas River and underflow ~~has~~ has little to ~~no~~de ~~not~~ effect on groundwater storage in the Paso Robles formation.

The Templeton CSD and Atascadero Mutual Water Company are ~~is the sole~~ water purveyors serving the unincorporated County within the Atascadero Sub-basin. Both purveyor's water supply sources include g~~G~~roundwater from the Paso Robles Formation and the Salinas River underflow within the Atascadero ~~Groundwater~~ Sub-basin ~~is the primary water supply source for the CSD; recycled water and~~ water from the Nacimiento Water Project (NWP) and treated wastewater effluent percolated into the Salinas River underflow ~~are also sources. An additional source of water for~~ Templeton CSD discharges ~~comes from their re-use program with disposal of~~ treated wastewater effluent from the Meadowbrook WWTP ~~into percolation discharge~~ ponds where it ~~This program allows the Templeton CSD to~~ percolate~~s~~ treated effluent into the ~~groundwater basin~~ Salinas River Underflow and the same amount of water is subsequently retrieved~~extract the same amount of water~~, less 2% to account for loss, 28 or 36 months later from municipal wells downstream. The Templeton CSD has an annual allocation of ~~is also under contract to receive~~ 250 AFY from the NWP which is also discharged into the Salinas River underflow and retrieved in the same manner. The Atascadero MWC is a major partner of the Nacimiento Water Project, having contracted for an annual allocation of 2,000 AFY which it uses to recharge the Salinas River underflow. ~~, allotment of this future supply.~~

The perennial yield of the Sub-basin was estimated in 2002 to be 16,400 AFY (Fugro, 2002). The current ~~estimated gross net~~ groundwater pumping in the Sub-basin during ~~2006 was determined~~is estimated to be ~~15,545 AF (Todd 2009), 8,403~~500 AFY which is 51% ~~is 95~~ percent of the Sub-basin perennial yield of 16,400 AFY. ~~T. A more recent estimate based on data from the 2012 Master Water Report and data collected from the purveyors within the Sub-basin (Table II-15) suggests that water demand from urban, rural and agricultural users is currently about 23,212 AFY which exceeds the perennial yield of the Sub-basin.~~

Commented [t3]: Because there is a significant amount of water being added to the basin via NWP and percolation of treated wastewater, net pumping better reflects the amount of water being withdrawn from the Sub-basin.

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~~Recent modeling summarized in the Paso Robles Groundwater Basin Model Update Draft Final~~

Report (Todd, 2014) assumes the Sub-basin is hydraulically separate from the main Basin, but does not calculate a separate perennial yield or water budget (i.e., average annual inflow and outflow). An evaluation of the conceptualized aquifer system used in the Basin Model Update was inconclusive as to whether the Rinconada Fault serves as a hydraulic barrier that separates the Sub-basin from the main Basin. Accordingly, the Basin Model Update calculates the water budget for the Paso Robles Groundwater Basin as a whole inclusive of the Atascadero Sub-basin

~~and concludes that the perennial yield is currently being exceeded and will continue to be exceeded under a No Growth scenario.~~

~~The Atascadero Sub-basin will be included in the Basin Management Plan and groundwater management district currently being considered by the County and affected stakeholders. One of the goals of the Basin Plan is to identify a sustainable management strategy for the Paso Robles Groundwater Basin as a whole, including the Sub-basin. Further study is needed to determine the connectivity between the Sub-basin and main basin and the effect that deliveries from the Nacimiento Project will have on the perennial yield. However, because demand for water from the Paso Robles Groundwater Basin currently exceeds the perennial yield, and the hydraulic separation of the Sub-basin has not been determined conclusively, water demand projected over 15 years will equal or exceed the estimated dependable supply.~~ he water purveyors, County, District, and local land owners intend to actively and cooperatively participate in the development of a Sustainable Groundwater Management Plan for the Atascadero Sub-basin.

Recommended Level of Severity I~~I~~

Current Net Groundwater Pumping in the Atascadero Sub-basin.

Demand (afy)	TCSD	AMWC	Paso	Ag	Rural	Total
Current, Paso Formation	680	2,153	0	605	800	**4,238**
Current, Underflow	665	3,372	3,243	745	0	**8,025**
Treated Wastewater Retrieval, Basin Augmentation	(165)	(1,500)	0	0	0	**(1,665)**
NWP	(250)	(2,000)	0	0	0	**(2,250)**
Total	**930**	**2,025**	**3,243**	**1,350**	**800**	**8,348**

Table II-15 -- Atascadero Sub-basin Existing and Forecasted Water Supply and Demand

Demand	Templeton CSD	Garden Farms	Atascadero MWC	City of Paso Robles	Agriculture	Rural
Current Demand (AFY)	1,344~~.3~~[1]	(5)	5,525	3,243[9]	1350~~10,62~~	~~1,480~~800
Forecast Demand in 15 Years (AFY)	1,892~~.2~~	46.5	6,562	3,485.5	~~12,610~~	~~1,705~~
Forecast Demand in 20 Years (AFY)	1,95~~4.8~~	62	6,908.3	3,566.3	~~13,272.3~~	~~1,780~~
~~Buildout~~Build out Demand (30 Or More	2,-034-2,260[2]	48-93	6,840 – 7,600[2]	3,728	~~9,740-14,600~~	~~1,810-1,930~~
Supply						
Atascadero Groundwater Sub-basin (AFY)[3,4]						
Paso Robles Formation (AFY)[4]	1,050 ~~500~~ 602	48-93	3,193	~~3,728~~[9]	(6)	(6)
Salinas River Underflow (AFY)[4]		0	3,372	4,063	745[7]	0

Comment [t4]: This is inaccurate. The demands on the Atascadero Sub-basin are significantly lower than the WSA figures used for comparison.

Comment [t5]: This has not been determined and should not be stated here.

Comment [TM7]: These appear to be underflow quantities, not from the Paso Robles Formation.

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Comment [TM6]: Update with supply figures?

Comment [TM8]: Should this be the water permit max. amount?

~~Recycled Water~~Treated Wastewater Retrieval /Basin	~~132~~165 /~~475~~470	0	~~81,500~~	0	0	0
Nacimiento Water Project (AFY) (10)	~~2,603~~245	0	2,000	0	0	0
Other ~~Groundwater~~Water Supply Sources	0	0	0	0	~~Uncertain~~0	~~Uncertain~~0
Total Supply:	~~1,932~~2,0	48-93	~~8,565~~10,06	4,063	~~Uncertain~~	~~Uncertain~~
Water Supply Versus Forecast Demand	~~Because W~~ater demand from basin ~~currently exceeds~~ is less than the perennial yield ~~, and~~ ~~the hydraulic separation of the Salt Basin has not been determined conclusively,~~ ~~W~~ater demand projected over ~~15~~ 20 years will not equal or exceed the					

Sources: Water System Usage forms: July 2012 – June 2013; July 2013 – June 2014, San Luis Obispo County Master Water Report, 2012, Table 4.66

Notes:

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Commented [TM9]: Update totals

1. ~~See Table 8-1.~~ Current year data for agriculture and rural are from 2012.
2. Ten (10) percent additional water conservation (beyond what has already been accomplished) assumed for the low end of the forecast build-out demand.
3. The agencies, County, District, and local land owners intend to actively and cooperatively ~~manage the Paso Robles Groundwater Basin (which includes the Sub-basin) via the~~participate in the development of a Sustainable Groundwater Management Plan.
4. The perennial yield was estimated to be 16,400 AFY. Extractions from the Sub-basin occur ~~primarily~~solely from the Salinas River Underflow and deeper formations. ~~Depending on the estimated use for the Agricultural and Rural sectors, future hydrology and whether additional Nacimiento supplies are utilized, Sub-basin studies are indicating that the perennial yield may be exceeded in the future. However, the safe yield of the Paso Robles Groundwater Basin is currently being updated.~~
5. No data were provided.
6. It is assumed that the majority of water supply for rural users and about 13 percent of the supply for agricultural users comes from the Sub-basin.
7. SWRCB records indicate that 745 AFY could be diverted from the Salinas River (direct diversion or underflow). It is assumed that the entire amount is used for agriculture.
8. ~~It is uncertain whether the sources of supply outside the Sub-basin in addition to the Sub-basin itself are sufficient to sustain the level of demand.~~
9. It was assumed that Paso Robles currently extracts one-half of its current groundwater demand and one-half of its total future groundwater demand from the Atascadero Sub-basin.
10. An additional 6,100 AFY of surplus Nacimiento Water is available for purchase. No new infrastructure is required.

Commented [PAS10]: "solely" not primarily. By definition, there are no other groundwater sources in the subbasin, other than underflow and Paso Robles formation.

Commented [PAS11]: I believe that this entire note should be deleted.

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Templeton/San Miguel/Shandon Water Systems

Future water supply for the Templeton CSD will likely come from the Nacimiento Water Project (NWP). Templeton CSD could increase its NWP allotment. Templeton CSD would percolate raw water from the NWP into the Salinas River Underflow, in a similar manner that they percolate effluent from the Meadowbrook WWTP percolation ponds (Selby Pond site). In addition, the Templeton CSD might divert additional wastewater flows to the Meadowbrook WWTP (which currently flow to the City of Paso Robles WWTP), which will allow them to increase percolation into and extraction from the Salinas River Underflow by as much as 343 AFY. ~~However, no plans are in place to develop these sources.~~

Commented [TM12]: Plans are being developed.

No significant water system limitations were reported. No recommended Levels of Severity.

Table II-18 -- Summary of Recommended Levels of Severity	
Groundwater Basins and Affected Water Purveyors	**Recommended LOS**
Water Purveyors Nipomo CSD Woodlands Mutual Water Co. Oceano CSD	
Santa Margarita Groundwater Basin *Water Purveyors* CSA 23	III
Paso Robles Groundwater Basin-Main Basin *Water Purveyors* San Miguel CSD CSA 16 – Shandon	III
Paso Robles Groundwater Basin – Atascadero Sub-basin *Water Purveyors* Atascadero Mutual Water Company (AMWC) Templeton CSD	III
Lake Nacimiento Area *Water Purveyors* Heritage Ranch CSD Nacimiento Water Co.	None

Water Systems

No Levels of Severity are recommended.

Recommended Actions

General Recommendations

- Continue to support efforts to improve water conservation, the efficient use of water, and water re-use.
- Continue to collect development impact fees for the construction of water supply infrastructure.
- Support efforts to complete a Basin Management Plan for the Los Osos Groundwater Basin and the Paso Robles Groundwater Basin.
- Support efforts to develop sustainable supplemental sources of water.

San Simeon Valley and Santa Rosa Valley Groundwater Basins (Cambria)

1. LOS III to remain in place.
2. Collaborate with the Cambria Community Services District to address issuance of a limited number of intent-to-serve letters and building permits based on the aggressive water conservation program developed by Maddaus Water Management, Inc.
3. Collaborate with the Cambria Community Services District to revise the County Growth Management Ordinance to reflect the issuance of a small number of building permits for new development as part of a temporary pilot program.
4. Collaborate with the Cambria Community Services District to prepare a CEQA determination, with the County acting as a Responsible Agency, that identifies the potentially significant impacts of a temporary, small scale pilot program to issue intent-to-serve letters and building permits for new development.

Cayucos Valley and Old Valley Groundwater Basins (Cayucos)

1. Support efforts to secure an alternative supply as a reliability reserve, perhaps through the acquisition of an additional allocation from the Nacimiento Water Project.

Los Osos Groundwater Basin

1. LOS III to remain in place.
2. Continue to support efforts to complete and implement a Basin Management Plan.
3. Support efforts to complete the wastewater project.

San Luis Obispo Valley Groundwater Basin

1. Support efforts to determine the safe yield of the Avila Valley Sub-basin.

Santa Maria Valley groundwater Basin (Nipomo Mesa Area)

1. Consider ending the Title 8 retrofit-upon-sale ordinance in the NMWCA. The program has run for four years and approximately 5% of homes have needed retrofitting.
2. Follow the progress of the *Supplemental Water Alternatives Evaluation Committee*. Coordinate any needed County actions such as an AB 1600 study to quantify the costs and benefits of the identified supplemental water project for groundwater users outside the Nipomo CSD.
3. Collaborate with the Nipomo CSD and other stakeholders to assist in their efforts to address area wide water issues.
4. Continue to help fund area wide water conservation through the fee on new construction.

Paso Robles Groundwater Basin

1. LOS III for the Main Basin ~~as a whole and for the Atascadero Sub-basin.~~

2. **Continue to support efforts to complete and implement a sustainable Basin Management Plan.**

Paso Robles Groundwater Basin, Atascadero Sub-basin

1. LOS I for the Atascadero Sub-basin

2. Continue to support efforts to complete and implement a Sustainable Basin Management Plan.

Templeton CSD – Meadowbrook Treatment Plant

The Templeton CSD operates a wastewater collection system that serves the community of Templeton. There are two wastewater tributary areas. The area on the west side of Highway 101 flows to the CSD-owned Meadowbrook Wastewater Treatment Plant. The majority of flows generated by the east side of Highway 101 is sent to the Paso Robles treatment plant. By agreement, the Templeton CSD is allotted 0.443 MGD of the Paso Robles treatment plant capacity.

The Templeton CSD system has a design flow of 0.~~043~~ 60 MGD; current (2014) average daily flows are
0. ~~0~~16 MGD, or ~~37~~27% of design capacity. Based on the projected growth in population within the CSD service area, the CSD portion of treatment plant is not expected to be reached for the next ~~five~~ twenty years or more.

There was one reported discharge violation associated with the Meadowbrook system for the period 2012-2014. In November 2012, root intrusion caused a spill of approximately 25 gallons. No surface water bodies were affected.

In 2012, the Templeton CSD authorized staff to proceed with the design of the East Side Force Main and Lift Station Project. A number of tasks were identified and staff proceeded with the work with the assistance of consultants as required. Several of the tasks are proceeding concurrently. The Paso Robles WWTP was originally constructed in 1954 and though it has been upgraded several times, it is not capable of meeting its Waste Discharge Requirements to the extent that it has incurred significant fines for violations and a replacement of the WWTP is necessary. Paso Robles awarded the construction contract to W.M. Lyles and issued a Notice to Proceed on April 1, 2013 to build the Paso Robles WWTP replacement project. Substantial completion of the project is scheduled for October 2015.

No levels of severity are recommended for either collection or treatment.

Table III-14 -- Templeton CSD Meadowbrook Treatment Plant – Recommended Levels of Severity for Wastewater Treatment

2014 Service Area Population	2014 Average Daily Flow (MGD)	2020 Service Area Population	2020 Estimated Average Daily Flow (MGD)	Design Flow[1] (MGD)[2]	Percent of Design Flow in 2020	Recommended Levels of Severity
~~7,099~~5560	0.~~0~~16 0.220	~~7,261~~	0.~~0~~16	0.~~043~~600 0.443	~~38~~27% 50%	None

Sources: San Luis Obispo County Department of Public Works, 2014; Central Coast RWQCB, 2014; SLOCOG, 2014

Notes:
1. Design Flow = average daily dry weather flow in million gallons per day.
2. MGD = Million gallons per day

Commented [TM13]: Some of the population are on septic systems.

Commented [TM15]: Population needs to take into account septic systems within the District.

Commented [TM14]: TCSD has two wastewater areas going to different wwtps.

Table III-15 – Recommended Levels of Severity for Wastewater Treatment

Agency	2014 Service Area Population	2014 Average Daily Flow (MGD)	2014 Per Capita Average Daily Flow (MGD)	2020 Service Area Population	2020 Estimated Average Daily Flow (MGD)	Design Flow[1] (MGD)[2]	Percent of Design Flow In 2020	Recommended Levels of Severity
Avila Beach CSD[3]	1,484	0.057	0.0000384	1,542	0.059	0.2	30%	None
Cambria CSD[4]	6,032	0.67	0.0001110	6,054	0.672	1.0	67%	None
Cayucos Sanitary District/Morro Bay Wastewater Treatment Plant[5]	12,710	0.964	0.0000758	12,825	0.973	2.36	41%	None
Country Club Estates – CSA 18	881	0.068	0.0000758	916	0.070	0.12	58%	None
Heritage Ranch CSD	2,450	0.14	0.0000571	2,496	0.143	0.4	36%	None
Nipomo CSD – Black Lake	854	0.052	0.0000608	840	0.051	0.10	51%	None
Nipomo CSD – Southland Treatment Plant	15,503	0.64	0.0000412	15,850	0.655	0.9	73%	None
San Miguel CSD	2,432	0.096	0.0000394	2,650	0.105	0.45	23%	None
San Miguelito Mutual Water Co.	612	0.08	0.0001285	636	0.082	0.15	55%	None
San Simeon CSD	445	0.085	0.0001910	435	0.083	0.2	42%	None
South San Luis Obispo County Sanitation District[6]	37,784	2.52	0.0000666	38,815	2.59	3.3	78%	None
Oak Shores CSA[7]	348	0.032	0.0000919	362	0.033	0.1	33%	None
Templeton CSD[8]	~~7,099~~ 5560	0.016 0.220	~~0.0000022~~	~~7,261~~	0.016	0.043~~0.600~~ 0.443	~~38~~27% 50%	None

Sources: San Luis Obispo County Department of Public Works, 2014; Central Coast RWQCB, 2014; SLOCOG, 2014

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Notes for Table III-~~2~~15:

3. Design Flow = average daily dry weather flow in million gallons per day.
4. MGD = Million gallons per day
5. CSD = Community Services District
6. By agreement, Hearst Castle is allotted 0,05 MGD of the San Simeon treatment plant capacity.
7. The Morro Bay wastewater treatment plant serves the Cayucos Sanitary District and the City of Morro Bay. By agreement, Cayucos SD is allotted 0.721 MGD of Morro Bay treatment plant capacity.
8. South County Sanitary District serves the cities of Arroyo Grande and Grover Beach and the unincorporated community of Oceano.
9. CSA = County Service Area
10. By agreement, Templeton CSD is allotted 0.~~40~~443 MGD of the Paso Robles treatment plant capacity.

Septic Systems

Santa Margarita

The community of Santa Margarita relies entirely on individual septic systems for wastewater disposal. Septic systems have failed in some parts of the community subject to shallow groundwater levels. According to the 2013 Santa Margarita Community Plan, the location of urban densities on clay soils, combined with poor storm drainage, have created problems for successful septic system operation. In the 1970's, septic systems in Santa Margarita had a 19 percent failure rate during periods of seasonal flooding. Since then, engineered septic systems have been required by the County, and they have shown better performance. However, the County Health Department does not administer an annual septic maintenance inspection program, and the current failure rate is not precisely known.

Drainage problems still exist in Santa Margarita. However, with suitable drainage control, the long term use of septic systems could be feasible if the systems are properly maintained by owners. Development of existing lots should provide adequate areas for leach fields and drainage control. Formation of a flood control zone of benefit would enable the community to pay the necessary costs to resolve flooding problems which in turn may help maintain septic systems in the community.

Continued development of the Santa Margarita Ranch will necessitate the construction of a centralized wastewater system. The development plan for the project includes the dedication of land for a potential future sewage treatment facility of up to ten (10) acres. The capacity, features, location and timing of this potential future sewage treatment facility have not yet been determined.

Although no public data are available regarding the failure rate of existing septic systems, previous system failures suggest this is a persistent problem which could worsen over time. **Recommended Level of Severity I**

Shandon

According to the 2012 Shandon Community Plan, the community is served by individual septic tank and leach field systems with a majority located on small lots. The Community Plan requires a community wastewater system to be constructed with new development. The wastewater system improvements will consist of a backbone network of gravity sewer pipelines, lift stations, force mains, a waste water treatment facility, and percolation basins. Until a community

10. The City of Paso Robles is permitted to extract up to 8 cfs (3,590 gpm) with a maximum extraction of 4,600 AFY (January 1 to December 31). For the purposes of this analysis, it was assumed that half (4,063 AFY) of the existing demand of 8,126 AFY was extracted from the Salinas River Underflow via the Thunderbird Wellfied

The Atascadero Sub-basin of the Paso Robles Groundwater Basin

The Atascadero Sub-basin is a sub-basin of the Paso Robles Groundwater Basin. The eastern boundary is the Rinconada fault. Because the fault displaces the Paso Robles Formation, the hydraulic connection between the aquifer across the Rinconada fault has been considered sufficient to warrant the classification of this area as a distinct sub-basin. Therefore, the Atascadero Sub-basin is defined as that portion of the basin west of the Rinconada fault. Primary constraints on water availability in the sub-basin include water rights and physical limitations. The rights to surface water flows in the Salinas River and associated pumping from the alluvium (Salinas River Underflow) have been fully appropriated by the State Water Resources Control Board (State Board) and no plans exist to increase these rights beyond the current allocations. Full appropriation implies that no additional rights to the Salinas River flows are being issued by the State Board at this time nor is any additional pumping for existing rights being granted. Therefore, the Salinas River does not represent a future source of additional water supply that can be developed beyond its present appropriation. However, pumping from the Salinas River and underflow has little to no effect on groundwater storage in the Paso Robles formation.

The Templeton CSD and Atascadero Mutual Water Company are water purveyors serving the unincorporated County within the Atascadero Sub-basin. Both purveyor's water supply sources include groundwater from the Paso Robles Formation and the Salinas River underflow within the Atascadero Sub-basin, water from the Nacimiento Water Project (NWP), and treated wastewater effluent percolated into the Salinas River underflow. Templeton CSD discharges treated wastewater effluent from the Meadowbrook WWTP into discharge ponds where it percolates into the Salinas River Underflow and the same amount of water is subsequently retrieved, less 2% to account for loss, 28 or 36 months later from municipal wells downstream. The Templeton CSD has an annual allocation of 250 AFY from the NWP which is also discharged into the Salinas River underflow and retrieved in the same manner. The Atascadero MWC is a major partner of the Nacimiento Water Project, having contracted for an annual allocation of 2,000 AFY which it uses to recharge the Salinas River underflow.

The perennial yield of the Sub-basin was estimated in 2002 to be 16,400 AFY (Fugro, 2002). The current net groundwater pumping in the Sub-basin during is estimated to be 8,350 AFY which is 51% percent of the Sub-basin perennial yield of 16,400 AFY. The water purveyors, County, District, and local land owners intend to actively and cooperatively participate in the development of a Sustainable Groundwater Management Plan for the Atascadero Sub-basin.

Recommended Level of Severity I

Current Net Groundwater Pumping in the Atascadero Sub-basin.

Demand (afy)	TCSD	AMWC	Paso	Ag	Rural	Total
Current, Paso Formation	680	2,153	0	605	800	**4,238**
Current, Underflow	665	3,372	3,243	745	0	**8,025**
Treated Wastewater Retrieval, Basin Augmentation	(165)	(1,500)	0	0	0	**(1,665)**
NWP	(250)	(2,000)	0	0	0	**(2,250)**
Total	**930**	**2,025**	**3,243**	**1,350**	**800**	**8,348**

Table II-15 -- Atascadero Sub-basin Existing and Forecasted Water Supply and Demand

Demand	Templeton CSD	Garden Farms	Atascadero MWC	City of Paso Robles	Agriculture	Rural
Current Demand (AFY)	1,344[1]	(5)	5,525	3,243[9]	1350	800
Forecast Demand in 15 Years (AFY)	1,892	46.5	6,562	3,485.5		
Forecast Demand in 20 Years (AFY)	1,955	62	6,908.3	3,566.3		
Build out Demand (30 Or More Years) (AFY)	2,034-2,260[2]	48-93	6,840 – 7,600[2]	3,728		
Supply						
Atascadero Groundwater Sub-basin (AFY)[3,4]						
Paso Robles Formation (AFY)	1,050	48-93	3,193	-	(6)	(6)
Salinas River Underflow (AFY)	602	0	3,372	4,063	745[7]	0
Treated Wastewater Retrieval /Basin Augmentation (AFY)	165	0	1,500	0	0	0
Nacimiento Water Project (AFY) (10)	245	0	2,000	0	0	0
Other Water Supply Sources (AFY)	0	0	0	0	0	0
Total Supply:	2,062	48-93	10,065	4,063		
Water Supply Versus Forecast Demand	Water demand from basin is less than the perennial yield. Water demand projected over 20 years will not equal or exceed the estimated dependable supply.[8]					

add corrected forecast demands

add corrected summary

Sources: Water System Usage forms: July 2012 – June 2013; July 2013 – June 2014, San Luis Obispo County Master Water Report, 2012, Table 4.66

Notes:

1. Current year data for agriculture and rural are from 2012.
2. Ten (10) percent additional water conservation (beyond what has already been accomplished) assumed for the low end of the forecast build-out demand.
3. The agencies, County, District, and local land owners intend to actively and cooperatively participate in the development of a Sustainable Groundwater Management Plan.
4. The perennial yield was estimated to be 16,400 AFY. Extractions from the Sub-basin occur soley from the Salinas River Underflow and deeper formations.
5. No data were provided.
6. It is assumed that the majority of water supply for rural users and about 13 percent of the supply for agricultural users comes from the Sub-basin.
7. SWRCB records indicate that 745 AFY could be diverted from the Salinas River (direct diversion or underflow). It is assumed that the entire amount is used for agriculture.
8.
9. It was assumed that Paso Robles currently extracts one-half of its current groundwater demand and one-half of its total future groundwater demand from the Atascadero Sub-basin.
10. An additional 6,100 AFY of surplus Nacimiento Water is available for purchase. No new infrastructure is required.

Templeton/San Miguel/Shandon Water Systems

Future water supply for the Templeton CSD will likely come from the Nacimiento Water Project (NWP). Templeton CSD could increase its NWP allotment. Templeton CSD would percolate raw water from the NWP into the Salinas River Underflow, in a similar manner that they percolate effluent from the Meadowbrook WWTP percolation ponds (Selby Pond site). In addition, the Templeton CSD might divert additional wastewater flows to the Meadowbrook WWTP (which currently flow to the City of Paso Robles WWTP), which will allow them to increase percolation into and extraction from the Salinas River Underflow by as much as 343 AFY.

No significant water system limitations were reported. No recommended Levels of Severity.

MEMORANDUM

1149-0007
Woodlands

Date: March 20, 2015

To: Rob Miller, PE

From: Kari Wagner, PE

Subject: Review of the Resource Summary Report

As requested, I reviewed the Water Supply and Water Systems chapter of the 2012-2014 Resource Summary Report, prepared by the County of San Luis Obispo as it pertains to the Woodlands Mutual Water Company's water demands and water supplies. The following are comments on the report:

- Table II-2: Safe Basin Yield is noted as 4,800-6000 AFY should change to "No safe yield has been determined by NMMA". Paragraph in the notes should be updated to reflect this change.
- Page 55 – Modify Nipomo CSD will be required to purchase 1,667 AFY of that supply, not 2,167 AFY. The difference is the additional 500 AFY that NCSD is opting to take.
- Table II-13: Change the following for WMWCo.
    - Forecast Demand in 15 Years: 1582 AFY
    - 20 Years: 1582 AFY
    - Buildout: 1582 AFY
    - Santa Maria Valley Groundwater Basin Supply: 1020 AFY
    - Recycled Water: 145 AFY
    - Total Supply: 1582 AFY
    - Add footnote to Forecast Demand of 1582 to read: "Demands are based on an 18-hole golf course constructed in Phase IIA/IIB. Projected demands may be reduced if the open space is planted with vineyards or drought tolerant landscaping in lieu of the golf course."

Please let me know if you have any questions.

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Re: Revised County RMS Report - Garden Farms Community Water District

Charron Sparks to: Joe Patterson, bpedrotti@co.slo.ca.us 04/14/2015 07:17 AM
Cc: "jbergman@co.slo.ca.us"

From: Charron Sparks <gcsparks@att.net>
To: Joe Patterson <joe.smaac@gmail.com>, "bpedrotti@co.slo.ca.us" <bpedrotti@co.slo.ca.us>
Cc: "jbergman@co.slo.ca.us" <jbergman@co.slo.ca.us>
Please respond to Charron Sparks <gcsparks@att.net>

History: This message has been forwarded.

2 attachments

gfcwdmeterreadsummary.xls gfcwdmeterreadsummary.xls

Hello
Attached is a 5 year summary of water usage. Note that it does not change much year to year. We are almost at full build-out and it is not reasonable to estimate a 1.5 AF increase per year. I don't believe we have had a new home in the community for years. It is mostly remodels of existing homes.
Please contact me directly if you need additional information. I work in the Assessor's Office and my extension is 5646.
Charron Sparks
Garden Farms Chairman of the Board

From: Joe Patterson <joe.smaac@gmail.com>
To: "bpedrotti@co.slo.ca.us" <bpedrotti@co.slo.ca.us>
Cc: "jbergman@co.slo.ca.us" <jbergman@co.slo.ca.us>; Charron Sparks <gcsparks@att.net>
Sent: Monday, April 13, 2015 11:56 AM
Subject: Re: Revised County RMS Report - Garden Farms Community Water District

Thank you Brian and Charron. Please let me know if I can help in any way.

Thank you,
Joe Patterson
SMAAC Chairman
www.smaaconline.org

On Mon, Apr 13, 2015 at 11:46 AM, <bpedrotti@co.slo.ca.us> wrote:

> Joe-
>
> I'll take a look at your marked-up document and get back with Charron ASAP on any information they need. I'm sure we can make any necessary corrections prior to the Board meeting on May 5.
>
> -Brian